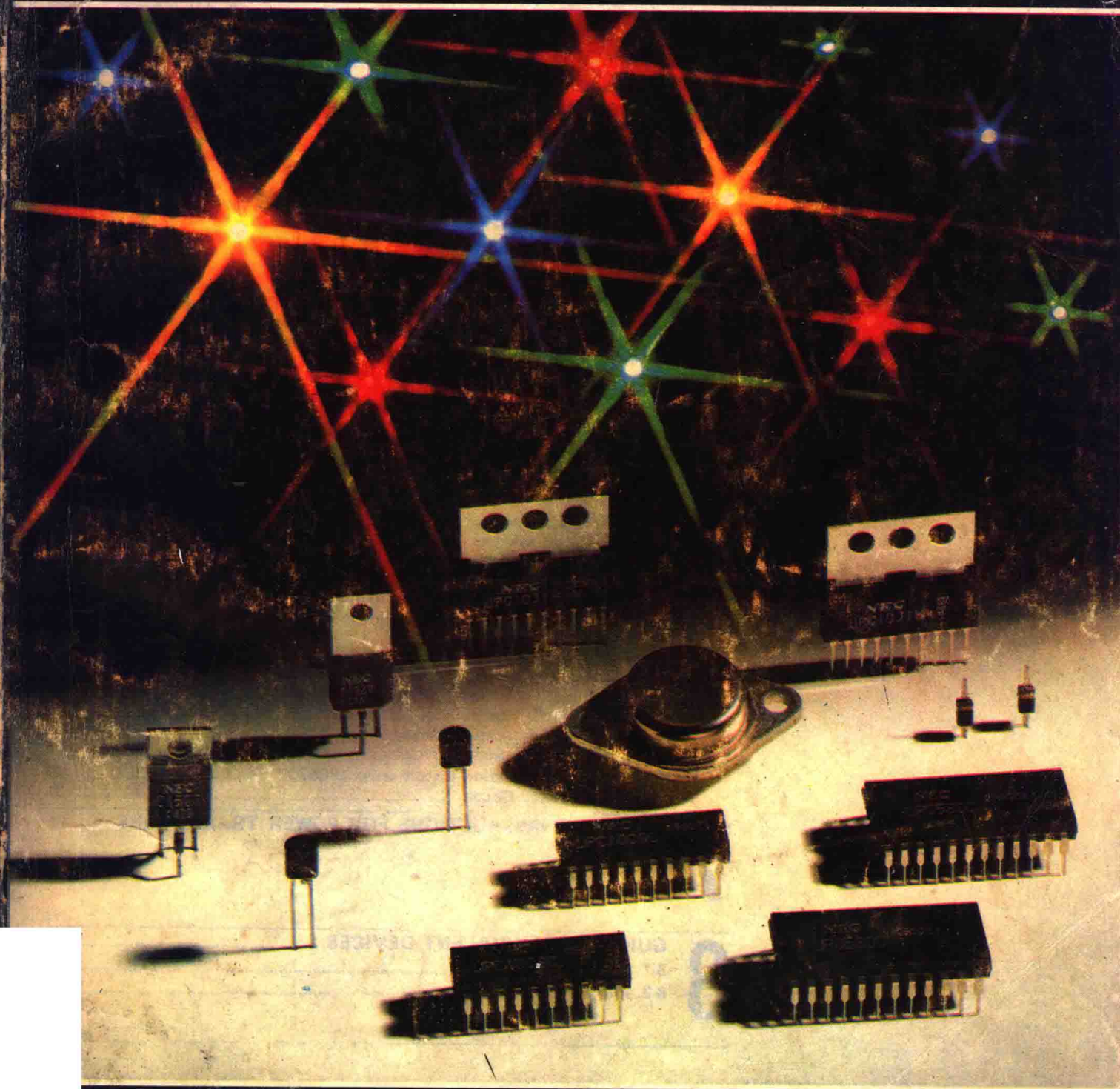


SHIJIE JINGTIGUAN CANSHU YU DAIHUAN SHOUC

世界晶体管参数 与代换手册

第七分册 (世界晶体管代换手册)



· 电子科技大学出版社 ·

世界晶体管参数与代换手册

第七分册

• 世界晶体三极管代换 •

电子科技大学出版社

• 1990 •

内 容 提 要

本书是《世界晶体管参数与代换手册》的第七分册《世界晶体三极管代换》分册。此分册主要编排了世界上各大生产晶体三极管厂家的晶体三极管简明参数，并给出了可代换的国产晶体三极管型号。

世界晶体管参数与代换手册

第七分册

世界晶体三极管代换参数

家电维修丛书编译组

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使用说明

此册是《世界晶体管参数与代换手册》一书的世界晶体管代换分册，通过它可以较方便、迅速地查证晶体管的简明参数，以及国外与国外型号代换，国外与国内型号之间的代换，其具体使用方法简介如下：

型号栏：此栏所列晶体管型号的编排次序，是按型号字头的英文顺序编排的，适合通常的检索方法。

生产厂：此栏编译了晶体管的一个或多个生产厂，其厂商的名称采取英文缩写，在此书第一分册附录页中编译了世界主要半导体器件生产厂的中文译名，以及通信地址。

材料：此栏说明晶体管所用材料，是锗 (Ge)，或硅 (Si)，以及其极性：PNP 或 NPN。

外形：根据此栏数字，在外形图一节中查到该晶体管的外形式样和管脚极性位置。

简明参数：此栏列出了晶体管用途和简明参数。

1.用途：此处所列用途是其主要用途，并采取英文缩写字母编排。其英文缩略语注释如下：

A	放大	HF	高频放大	SSB	单边带
AGC	自动增益	hi-rel	高可靠性的	SW	开关电路
AFC	自动频率控制	IF	中频放大	Sym	对称类
AM	调幅	Kompl	互补对称	Uni	一般用途
Att	衰减器	LF	低频放大	Unit	单管
AH	高频放大	LN	低噪放大	ra	低噪声
AHP	高频功放	Mix	混频	rc	自动增益控制级
AP	功率放大	NF	音频用	RF	射频
AL	光敏放大	Opto	光电元件	Mod	调制度
AF	音频放大	OSC	振荡	Mul	频率倍增
Conv	变频	Min	微型	Tr	激励
ch	削波放大	P	功率放大	Tun	调谐
Darl	达林顿	PA	功率放大	Typ-Code	小型器件标志
Dual	差动放用配对管	PQ	高频功放	TV	电视用
Diff	差分放大	RA	高频放大	V	前置/输入级
E	输出级	S	开关电路	VA	场偏
FM	调频	SC	削波开关	VHF	甚高频
FET	场效应管	SH	高速开关	Vid	视频输出级
gep	互补类型	SP	功率开关	UHF	基高频
HA	行偏转	SS	快速	UJT	单结型管

2.简明参数：此栏主要列出了下面几种参数：

V_{CBO} 发射极开路，集电极—基极反向击穿电压。

I_{CM} 最大允许集电极电流。

P_{CM} 最大允许集电极耗散功率。

f_a 或 f_T 共基极截止频率， α 或特征频率。

国外代换型号和国内代换型号：

此栏列出了国外型号之间的代换，以及相应与国内型号的代换，当然所列代换型号，并不是唯一的，读者还可以根据用途，与所代换型号参数对比，可有其它多种代换型号。其代换方法如下所述：

晶体管代换方法

1. 类型相同:

a. 即所代换晶体管与现有的晶体管材料相同, 锗管 (Ge) 代换锗管; 硅 (Si) 管代换硅管。

b. 极性相同: 即 PNP 代换 PNP; NPN 代换 NPN。

c. 种类相同: 即三极管代换三极管; 二极管代换二极管; 场效应三极管、双基极二极管代换类推。

2. 参数相同或相近:

此处所指参数是指主要特性参数, 由于晶体管参数种类较多, 要做到每一种参数都相同或相近是困难的或根本办不到的。故此时可根据用途, 去考虑几种主要特性参数, 并且根据所用设备、地点、环境、温度、军用、民用等有关情况, 去选择所代换的型号与参数。例如: 军用的; 长期通电; 环境条件差; 温度高; 要从严选择。反之条件要求低一些, 但不管哪一种情况, 以下几个主要参数需加注意:

最大集电极允许直流电流 I_{CM}

最大集电极直流耗散功率 P_{CM}

最高反向击穿电压 $V_{CBO}, V_{CEO}, V_{EBO}, V_{CES}, V_{CEX}$

频率特性 $f_{max}, f_{\beta}, f_{\alpha}$

以上几种参数, 根据所代换晶体管的用途, 作适当量。例如要代换高频电路的晶体管时, f 参数是主要考虑参数, 作低频放大时, P_{CM} 和 I_{CM} 是主要考虑参数, 在开关电路中, 主要考虑 t 参数, 当然作为耐压方面, 主要根据电路所选择直流电压和交流电压, 如所在电路是电感性电路时, 还要充分考虑到谐波电压的冲击, 故需要留有较大余地。

本书中给出了一些代换的晶体管型号, 但我们仍然建议你最好将代换的晶体管和现有晶体管参数分别查阅, 并对照双方参数, 加以比较, 考虑能否代换, 以确定是否最佳代换选择。

目 录

使用说明	2
目录	3
晶体管代换方法	4
简明参数与代换	
A	1
B	14
C	97
D	99
E	101
F	102
G	105
K	110
M	111
N	129
O	131
S	134
T	139
Z	147
2N	151
2SA	251
2SB	274
2SC	291
2SD	353
2SK	377
3N	378
外形图	382

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
AC 106 AC 108	AEG AEG	Ge-PNP 1 Ge-PNP 1		NF-E, 40V, 1A, 0,4W, B-32 NF-E, 40V, 1A, 0,4W, B-50	AC 117 (3), AC 128 (2a), AC 153 (2a), AC 188K (3) AC 117 (3), AC 128 (2a), AC 153 (2a), AC 188K (3)	3AK32 3AK32
AC 107	MBL, MUL, VAL	Ge-PNP 1		NF-V-ra, 15V, 10mA	AC 151 r (2a), AC 191 (2a)	3AX51A
AC 108 AC 109 AC 110	SIE SIE SIE	Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a		NF-V/Tr, 20V, 50mA, B-40 NF-V/Tr, 20V, 50mA, B-70 NF-V/Tr, 20V, 50mA, B-100	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a)	3AX51C 3AX51C 3AX51C
AC 113 AC 114 AC 115	AEI AEI AEI	Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a		NF-V/Tr, 25V, 50mA NF-Tr/E, 25V, 200mA NF-V/Tr, 25V, 50mA	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a)	3AG55A 3AX51C 3AX51C
AC 116 (gelb, grün)	AEG	Ge-PNP 3		NF-Tr, 35V, 0,2A, B-55-140	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 117 AC 117R	AEG AEG	Ge-PNP 3 Ge-PNP 2		NF-E, 32V, 1A, 1,1W NF-E, 32V, 1A, 1,1W	AC 128K (3), AC 153K (3), AC 188K (3), AC 193K (3) kompl.: AC 12 AC 128 (2a), AC 153 (2a), AC 193 (2a)	3AK32
AC 118 AC 119		Ge-PNP Ge-PNP		NF-E NF-E	AC 128 (2a), AC 153 (2a), AC 193 (2a) AC 128 (2a), AC 153 (2a), AC 193 (2a)	
AC 120(IV-V) AC 121(IV-VII)	SIE SIE	Ge-PNP 2a Ge-PNP 2a		NF-Tr/E, 20V, 0,3A, 0,6W NF-Tr/E, 20V, 0,3A, 0,9W	AC 128 (2a), AC 153 (2a), AC 193 (2a) AC 128 (2a), AC 153 (2a), AC 193 (2a)	3AX55A 3AX55A
AC 122(rt, ge, gn, vi, we) AC 122/30 (rt, ge, gn, vi)	AEG, DIT, SES AEG	Ge-PNP 4 Ge-PNP 4		NF-V, 30V, 0,2A, B-40-300 NF-V, 45V, 0,2A, B-40-200	AC 125 (2a), AC 128 (2a), AC 151 (2a), AC 192 (2a) AC 151 (2a), ASY 48 (2a)	3AX53A 3AX54C
AC 123 (gelb, grün)	AEG	Ge-PNP 3		NF-Tr, 45V, 0,2A, B-55-140	AC 151 (2a), ACY 24 (3), ASY 48 (2a) AC 153K (3)	3AX54C
AC 124 AC 124R	AEG AEG	Ge-PNP 3 Ge-PNP 2		NF-E, 45V, 1A, 1,1W NF-E, 45V, 1A, 1,1W	AC 117 (3), AC 128K (3), AC 153K (3), AC 193K (3) AC 128 (2a), AC 153 (2a), AC 193 (2a)	3AK32
AC 125 AC 125F(Fz) AC 125Kz AC 125Uz AC 125W AC 125z	ATE, MBL, MOT, PHI, RTC TSM TSM TSM TSM TSM	Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a		NF-V/Tr, 32V, 0,2A B-80-170 NF-V-ra, 32V, 0,25A NF-V/Tr, 40V, 0,25A NF-V/Tr, 50V, 0,25A NF-V/Tr, 100V, 0,25A NF-V/Tr, 32V, 0,25A	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a) AC 151r (2a), AC 191 (2a) AC 122/30 (4), AC 151 (2a), ASY 48 (2a) ACY 24 (3), ASY 48 (2a) ACY 24 (3), ASY 48 (2a) AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A 3AX53A 3AX55A 3AX55A 3AX58A 3AX91E
AC 126	ATE, MBL, MOT, MUL, PHI, RTC, VAL	Ge-PNP 2a		NF-V/Tr, 32V, 0,2A, B-130-300	AC 122 (4), AC 151 (2a), AC 192 (2a)	3AX53A
AC 127	ATE, MBL, MOT, MUL, PHI, RTC, SIE, VAL	Ge-NPN 2a		NF-Tr/E, 32V, 0,5A, 0,34W	AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl.: AC 126, AC 132, AC 152	3BX95C
AC 128 AC 128K	ATE, MBL, MOT, MUL, PHI, RTC, VAL VAL	Ge-PNP 2a Ge-PNP 3		NF-E, 32V, 1A, 1W NF-E, 32V, 1A, 1W	AC 153 (2a), AC 188 (2a), AC 193 (2a) AC 117 (3), AC 153K (3), AC 188K (3), AC 193K (3) kompl.: AC 127	3AK32 3AK34A
AC 129 (ge, vi, schw.)	AEG	Ge-PNP 9		Min-NF, 5V, 10mA B-40-136	OC 57 (22), OC 58 (22), OC 59 (22), OC 60 (22)	3AG53A
AC 130	RTC, VAL	Ge-NPN 2a		symm., 20V, 0,1A	AC 190 Ersetzt in Synchronisierstufen (TV ev. durch 2 Ge-Dioden)	3BX1D
AC 131 AC 131/30	AEG AEG	Ge-PNP 4 Ge-PNP 4		NF-E, 30V, 1A, 0,75W NF-E, 45V, 1A, 0,75W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) AC 128 (2a), AC 153 (2a), AC 193 (2a) kompl.: AC 188	3AK32 3AK32
AC 132	ATE, MBL, MOT, PHI, RTC, VAL	Ge-PNP 2a		NF-E, 32V, 0,2A, 0,5W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 127	3AX53A
AC 134 AC 135 AC 136 AC 137	ATE ATE ATE ATE	Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a Ge-PNP 2a		NF-V, 20V, 0,2A, B-45 NF-V/Tr, 20V, 0,2A, B-70 NF-V/Tr, 25V, 0,2A, B-100 NF-V/Tr, 32V, 0,2A, B-170	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A 3AX53A 3AX53A 3AX51A
AC 138 (-4...-7) AC 138H	ATE ATE	Ge-PNP 2a Ge-PNP 2a		NF-V/Tr, 25V, 1,2A, B-30-280 -AC 138: 50V	AC 126 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK32 3AK33H
AC 139 (-4...-6) AC 139K	ATE ATE	Ge-PNP 2a Ge-PNP 3		NF-E, 32V, 1A, 1W, B-40-110 -AC 139	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) AC 128K (3), AC 153K (3), AC 188K (3), AC 193K (3)	3AK32
AC 141 (-4...-7) AC 141B AC 141H AC 141K AC 141HK	ATE ATE ATE ATE ATE	Ge-NPN 2a Ge-NPN 2a Ge-NPN 2a Ge-NPN 3 Ge-NPN 3		NF-E, 32V, 1,2A, 1W, B-60-160 -AC 141: 25V -AC 141: 50V -AC 141 -AC 141: 50V	AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl.: AC 142 kompl.: AC 142H kompl.: AC 142K kompl.: AC 142HK	3BX1D 3BX1D 3BX1D 3BX1D 3BX1D

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内代换型号
AC 142 (4...8)	ATE	Ge-PNP	2a	NF-E, 32V, 1.2A, 1W, B=40-110	AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 141	3AK32
AC 142H	ATE	Ge-PNP	2a	-AC 142: 50V	kompl.: AC 141H	3AK32
AC 142K	ATE	Ge-PNP	3	-AC 142: 50V	AC 153K (3), AC 188K (3), AC 193K (3) kompl.: AC 141K	
AC 142HK	ATE	Ge-PNP	3	-AC 142: 50V	kompl.: AC 141HK	
AC 150 (ge, gn, vl, wa)	AEG	Ge-PNP	4	NF-V-ra, 30V, 50mA, B=55-300	AC 151r (2a), AC 191 (2a)	3AX51A
AC 151 (IV - VII)	SIE	Ge-PNP	2a	NF-V/Tr, 32V, 0.2A, B=30-250	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 192 (2a)	3AX53A
AC 151 r (IV - VI)	SIE	Ge-PNP	2a	NF-V-ra, 32V, 0.2A, B=30-150	AC 191 (2a)	3AX53A
AC 152 (IV - VI)	SIE	Ge-PNP	2a	NF-Tr/E, 32V, 0.5A, 0.9W B=30-150	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 127	3AX55A
AC 153 (V - VII)	SIE	Ge-PNP	2a	NF-E, 32V, 2A, 1W, B=50-250	AC 128 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 176	3AK32
AC 153K (V - VII)	SIE	Ge-PNP	3	NF-E, 32V, 2A, 1W, B=50-250	AC 128K (3), AC 188K (3), AC 193K (3) kompl.: AC 176K	3AK32
AC 153Y (V - VII)	SIE	Ge-PNP	2a	NF-E, 20V, 1A, 1.1W, B=50-250	AC 128 (2a), AC 188 (2a), AC 193 (2a)	
AC 154	AEI	Ge-PNP	2a	NF-E, 26V, 0.5A, 0.2W, B=52-235	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 157	3AX55A
AC 155	AEI	Ge-PNP	2a	NF-V/Tr, 26V, 50mA, B=47	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53C
AC 156	AEI	Ge-PNP	2a	NF-V/Tr, 26V, 50mA, B=50	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53C
AC 157	AEI	Ge-NPN	2a	NF-E, 26V, 0.5A, 0.2W, B=52-195	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl.: AC 154	3AX55A
AC 160 (A, B, rt, ga, gn, vl)	AEG	Ge-PNP	4	NF-V-ra, 15V, 10mA B=35-250	AC 151 r (2a), AC 191 (2a)	3AX51A
AC 161 (VI - VII)	DIT, SES	Ge-PNP	2	NF-V-ra, 15V, 0.1A, B=75-250	AC 151r (2a), AC 191 (2a)	3AX51A
AC 162	SIE	Ge-PNP	2a	NF-V, 32V, 0.2A, B=125	AC 151 (2a), AC 126 (2a), AC 192 (2a)	3AX53A
AC 163	SIE	Ge-PNP	2a	NF-V, 32V, 0.2A, B=190	AC 151 (2a), AC 126 (2a), AC 192 (2a)	3AX53A
AC 164	MUL	Ge-PNP	4	NF-V, 10V, 30mA, B>40	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AK1
AC 165	AEI	Ge-PNP	2a	NF-V/Tr, 32V, 50mA, B=90	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG55A
AC 166	AEI	Ge-PNP	2a	NF-E, 32V, 0.5A, 0.2W B=52-315	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 168	3AX55A
AC 167	ASN	Ge-PNP	2a	-AC 166: B=45-250		3AX55A
AC 168	AEI	Ge-NPN	2a	NF-E, 32V, 0.5A, 0.2W B=52-350	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl.: AC 166	3AX55A
AC 169	AEI	Ge-PNP	2a	Stabi, 2V, 30mA	-	3AX51A
AC 170	AEG	Ge-PNP	4	NF-V/Tr, 32V, 0.2A, B=125	AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 171	AEG	Ge-PNP	4	NF-V/Tr, 32V, 0.2A, B=200	AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 172	ATE, MBL, VAL	Ge-NPN	2a	NF-V-ra, 32V, 10mA, B>45	(AC 127 (2a))	3BX1D
AC 173 (V - VII)	DIT, MIS, SES	Ge-PNP	2	NF-Tr/E, 32V, 0.3A, 0.2W B=50-250	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AX55A
AC 174	DIT	Ge-PNP	2a	NF-E, 32V, 0.5A, 0.6W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3BX85C
AC 175	AEG	Ge-NPN	3	NF-E, 25V, 1A, 1.1W	AC 176K (3), AC 187K (3), AC 194K (3) kompl.: AC 117	3BX81B
AC 176	SIE, MUL	Ge-NPN	2a	NF-E, 32V, 1A, 1W	AC 187 (2a), AC 194 (2a)	
AC 176K	SIE, MUL	Ge-NPN	3	NF-E, 32V, 1A, 1W	AC 187K (3), AC 194K (3) kompl.: AC 153 kompl.: AC 153K	
AC 177	AEI	Ge-PNP	2a	NF-E, 32V, 0.5A, 0.2W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AX55A
AC 178	AEG	Ge-PNP	3	NF-E, 20V, 0.7A, 1.1W	AC 128K (3), AC 153K (3), AC 188K (3), AC 193K (3) kompl.: AC 178	3AK32
AC 179	AEG	Ge-NPN	3	NF-E, 20V, 0.7A, 1.1W	AC 176K (3), AC 187K (3), AC 194K (3)	
AC 180 (V - VII)	DIT, MIS, SES	Ge-PNP	2a	NF-E, 32V, 1.5A, 0.3W, B=50-250	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: AC 181	3AK32
AC 180K/L (V - VII)	DIT, SES	Ge-PNP	3	NF-E, 32V, 1.5A, 0.44W B=50-250	AC 128K (3), AC 153K (3), AC 188K (3), AC 193K (3) kompl.: AC 181K/L	3AK32
AC 181 (V - VII)	DIT, MIS, SES	Ge-NPN	2a	NF-E, 32V, 1.5A, 0.3W B=50-250	AC 176 (2a), AC 187 (2a), AC 194 (2a)	3BX1D
AC 181K/L (V - VII)	DIT, SES	Ge-NPN	3	NF-E, 32V, 1.5A, 0.44W B=50-250	AC 176K (3), AC 187K (3), AC 194K (3) kompl.: AC 180 kompl.: AC 180K/L	3BX1D
AC 182 (V - VII)	MIS, SES	Ge-PNP	4	NF-V/Tr, 32V, 0.15A B=50-250	AC 122 (4), AC 151 (2a), AC 125 (2a), AC 126 (2a), AC 192 (2a) AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK32

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内代换型号
AC 183 (V - VII)	MIS, SES	Ge-NPN	4	NF V/Tr, 32V, 0.15A 8-50-250	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a)	3BX1D
AC 184 (V - VII)	DIT, MIS, SES	Ge-PNP	4	NF Tr/E, 32V, 0.5A, 0.27W 8-50-250	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl. AC 185	3AX55A
AC 185 (V - VII)	DIT, MIS, SES	Ge-NPN	4	NF Tr/E, 32V, 0.5A, 0.27W 8-50-250	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl. AC 184	3BX85C
AC 186	AEG	Ge-NPN	4	NF E, 30V, 0.7A, 0.75W	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl. AC 131	3BX85C
AC 187 AC 187K	AEG, ATE, DIT, MBL, MUL, PHI, RTC, SIE, VAL	Ge-NPN	2a	NF E, 25V, 1A, 1W	AC 176 (2a), AC 194 (2a) kompl. AC 188	3AK32 3AK32
AC 188 AC 188K	AEG, ATE, DIT, MBL, MUL, PHI, RTC, SIE, VAL	Ge-PNP	2a	NF E, 25V, 1A, 1W	AC 128 (2a), AC 153 (2a), AC 193 (2a) kompl. AC 187	
		Ge-PNP	3	NF E, 25V, 1A, 1W	AC 128K(3), AC 153K(3), AC 193K(3) kompl. AC 187K	
AC 190	ATE	Ge-NPN		symm.	AC 130	3AK32 3AK32
AC 191 (4...8)	ATE	Ge-PNP	2a	NF V re, 32V, 0.25A 8-30-500	AC 151r	
AC 192 (4...8)	ATE	Ge-PNP	2a	NF V, 32V, 0.25A 8-30-500	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a)	
AC 193 (7...9) AC 193K(7...9)	ATE ATC	Ge-PNP Ge-PNP	2a 3	NF E, 32V, 1A, 1W NF E, 32V, 1A, 1W	AC 128 (2a), AC 153 (2a), AC 188 (2a) kompl. AC 194 AC 128K(3), AC 153K(3), AC 188K(3) kompl. AC 194K	3AK32 3AK32
AC 194 (7...9) AC 194K(7...9)	ATE ATE	Ge-NPN Ge-NPN	2a 3	NF E, 32V, 1A, 1W NF E, 32V, 1A, 1W	AC 176 (2a), AC 187 (2a) kompl. AC 193 AC 176K (3), AC 188K (3) kompl. AC 193K	
AC 230	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-20-40	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG56A
AC 240	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-30-50	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG56A
AC 241	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-50-80	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG56A
AC 242	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-80-150	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG56A
AC 250	EIY	Ge-PNP	2	NF V/Tr, 32V, 50mA	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AK1
AC 251	EIY	Ge-PNP	2	NF V/Tr, 32V, 125mA	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AK1
AC 330	EIY	Ge-NPN	2	NF V, 24V, 10mA, 8-20-40	AC 127 (2a) kompl. AC 530	3BX31B
AC 340	EIY	Ge-NPN	2	NF V, 24V, 10mA, 8-30-50	AC 127 (2a) kompl. AC 540	3BX31B
AC 341	EIY	Ge-NPN	2	NF V, 24V, 10mA, 8-50-80	AC 127 (2a) kompl. AC 541	3BX31B
AC 342	EIY	Ge-NPN	2	NF V, 24V, 10mA, 8-80-150	AC 127 (2a) kompl. AC 542	3BX31B
AC 350	EIY	Ge-NPN	2	NF V/Tr, 32V, 50mA	AC 127 (2a) kompl. AC 550	3AX51A
AC 351	EIY	Ge-NPN	2	NF V/Tr, 32V, 125mA	AC 127 (2a) kompl. AC 551	3BX31C
AC 502	RIZ	Ge-PNP	2	NF, 16V, 0.1A, 8-36-65	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 503	RIZ	Ge-PNP	2	NF, 16V, 0.1A, 8-65-120	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 504	RIZ	Ge-PNP	2	NF, 16V, 0.1A, 8-72-190	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 505	RIZ	Ge-PNP	2	NF, 16V, 0.1A, 8-100-200	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 506	RIZ	Ge-PNP	2	NF, 16V, 0.1A, 8-100-200	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 515	RIZ	Ge-PNP	2	NF-Tr, 16V, 0.1A, 8-60-95	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 516	RIZ	Ge-PNP	2	NF-Tr, 16V, 0.1A, 8-95	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 517	RIZ	Ge-PNP	2	NF-Tr, 20V, 0.2A, 8-45	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX51A
AC 518	RIZ	Ge-PNP	2	NF-Tr, 20V, 0.2A, 8-65	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 519	RIZ	Ge-PNP	2	NF-Tr, 20V, 0.2A, 8-75-45	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 520	RIZ	Ge-PNP	2	NF-Tr, 20V, 0.2A, 8-36-45	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 521	RIZ	Ge-PNP	2	NF-Tr, 20V, 0.2A, 8-65-120	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
AC 524	RIZ	Ge-PNP	2	NF E, 30V, 0.5A, 8-20-42	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AX55A
AC 525	RIZ	Ge-PNP	2	NF E, 30V, 0.5A, 8-36-45	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AX55A
AC 526	RIZ	Ge-PNP	2	NF E, 30V, 0.5A, 8-65-90	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AX55A
AC 527	RIZ	Ge-PNP	2	NF E, 30V, 0.5A, 8-70-120	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AX55A
AC 530	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-20-40	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) kompl. AC 330	3AX51A
AC 540	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-30-50	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) kompl. AC 340	3AX51A
AC 541	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-50-80	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) kompl. AC 341	3AX51A
AC 542	EIY	Ge-PNP	2	NF V, 24V, 10mA, 8-80-150	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a) kompl. AC 342	3AX51A
AC 548	EIY	Ge-PNP	2	NF-Tr, 26V, 0.15A, 8-30-50	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a)	3AX52A
AC 549	EIY	Ge-PNP	2	NF-Tr, 26V, 0.3A, 8-30-50	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a)	?
AC 550	EIY	Ge-PNP	2	NF V/Tr, 32V, 50mA	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) kompl. AC 350	3AX53A
AC 551	EIY	Ge-PNP	2	NF V/Tr, 32V, 125mA	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a) kompl. AC 351	3AX53A
AC 551R	EIY	Ge-PNP	2	NF V re, 32V, 125mA	AC 151r (2a), AC 191 (2a)	3AX53A
AC 552	EIY	Ge-PNP	2	NF V/Tr, 60V, 125mA	AC 122/30 (4), ACY 24 (3), ASY 48 (2a)	3AX54C

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
AC 553	EIY	Ge-PNP	2	NF-Tr/E, 20V, 0.3A, 0.12W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK32
AC 554	EIY	Ge-PNP	2	NF-Tr/E, 20V, 0.3A, 0.12W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK32
AC 555	EIY	Ge-PNP	2	NF-Tr/E, 32V, 0.3A, 0.12W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK32
AC 556	EIY	Ge-PNP	2	NF-E, 16V, 1A, 0.23W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK34A
AC 556K	EIY	Ge-PNP	2	NF-E, 16V, 1A, 0.35W	AC 128K (3), AC 153K (3), AC 188K (3), AC 193K (3)	3AK34A
AC 570	RIZ	Ge-PNP	2	NF, 70V, 0.5A, B-17-40	ACY 39 (6a), ASY 48 (2a)	3AK34A
AC 571	RIZ	Ge-PNP	2	NF, 70V, 0.5A, B-30-60	ACY 39 (6a), ASY 48 (2a)	3AK34A
AC 572	RIZ	Ge-PNP	2	NF, 70V, 0.5A, B-45-65	ACY 39 (6a), ASY 48 (2a)	3AK34A
AC 573	RIZ	Ge-PNP	2	NF, 70V, 0.5A, B-65-110	ACY 39 (6a), ASY 48 (2a)	3AK34
AC 577	RIZ	Ge-PNP	2	NF, 70V, 0.5A, B-45-110	ACY 39 (6a), ASY 48 (2a)	3AK34A
AC 598	RIZ	Ge-PNP	2	NF, 105V, 0.2A, B-20-60	ACY 39 (6a)	3AX54C
ACY 10 (I)	SIE	Ge-PNP	2	NF-V-rs, 32V, 50mA, B>32	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	22B00A
ACY 11 (I)	SIE	Ge-PNP	2	NF-V-rs, 32V, 50mA, B>38	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	
ACY 12 (I)	SIE	Ge-PNP	2	NF-V-rs, 32V, 50mA, B>38	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	
ACY 13 (I)	SIE	Ge-PNP	2	NF-V-rs, 16V, 50mA, B>80	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	
ACY 14 (I)	SIE	Ge-PNP	2	NF-V-rs, 32V, 50mA, B>64	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	
ACY 15 (I)	SIE	Ge-PNP	2	NF-V-rs, 32V, 50mA, B>64	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	
ACY 16	AEG	Ge-PNP	3	NF-Tr/E, 40V, 0.4A, 0.8W	AC 128K (3), AC 153K (3), ACY 33 (2a)	
ACY 17	MUL	Ge-PNP	6a	NF/S, 70V, 0.5A, B-50-150	ACY 24 (3), ACY 39 (6a)	22B00C
ACY 18	MUL	Ge-PNP	6a	NF/S, 50V, 0.5A, B-40-120	ACY 24 (3), ACY 44 (6a)	3AX55C
ACY 19	MUL	Ge-PNP	6a	NF/S, 50V, 0.5A, B-80-250	ACY 24 (3), ACY 44 (6a)	3AX55C
ACY 20	MUL	Ge-PNP	6a	NF/S, 40V, 0.5A, B-50-145	AC 128 (2a), AC 153 (2a), ACY 33 (2a), ACY 44 (6a)	3AX55B
ACY 21	MUL	Ge-PNP	6a	NF/S, 40V, 0.5A, B-90-250	AC 128 (2a), AC 153 (2a), ACY 33 (2a), ACY 44 (6a)	3AX55B
ACY 22	MUL	Ge-PNP	6a	NF/S, 20V, 0.5A, B-30-300	AC 128 (2a), AC 153 (2a), AC 188 (2a), ACY 33 (2a), ACY 41 (6a)	3AX55A
ACY 23 (V-VI)	SIE	Ge-PNP	2a	NF-V, 32V, 0.2A, B-50-150	AC 122 (4), AC 151 (2a), AC 126 (2a), ACY 32 (2a)	3AX53C
ACY 24	AEG	Ge-PNP	3	NF-Tr/E, 70V, 0.3A, 0.53W	ACY 39 (6a), ASY 48 (2a)	3AX54D
ACY 25 (I)	SIE	Ge-PNP	2	NF-rs, 32V, 50mA, B>78	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	3AX54C
ACY 27	ITT	Ge-PNP	32	NF, 40V, 0.2W, B-20-60	AC 122 (4), AC 151 (2a), AC 125 (2a), AC 126 (2a), ACY 32 (2a)	
ACY 28	ITT	Ge-PNP	32	NF, 40V, 0.2W, B-33-100	AC 122 (4), AC 151 (2a), AC 125 (2a), AC 126 (2a), ACY 32 (2a)	
ACY 29	ITT	Ge-PNP	32	NF-rs, 40V, B-45-145	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	
ACY 30	ITT	Ge-PNP	32	NF, 40V, 0.2W, B-31-120	AC 122 (4), AC 151 (2a), AC 125 (2a), AC 126 (2a), ACY 32 (2a)	
ACY 31	ITT	Ge-PNP	32	NF, 50V, 0.2W, B>38	AC 122/30 (4), AC 151 (2a), AC 125 (2a), AC 126 (2a), ACY 32 (2a)	3AX54C
ACY 32 (V-VI)	SIE	Ge-PNP	2a	NF-rs, 32V, 0.2A, B-50-150	AC 151r (2a), AC 191 (2a), ACY 23 (2a)	3AX53C
ACY 33 (VI-VIII)	SIE	Ge-PNP	2a	NF-Tr/E, 32V, 1A, 1.1W B-75-390	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AK34A
ACY 34	ITT	Ge-PNP	32	NF, 30V, 0.2W, B>20	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
ACY 35	ITT	Ge-PNP	32	NF, 30V, 0.2W, B>30	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
ACY 36	ITT	Ge-PNP	32	NF, 30V, 0.2W, B>30	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53A
ACY 38 (VI-VII)	DIT, MIS, SES	Ge-PNP	8	NF-V-rs, 15V, 100mA B-75-250	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	3AK33
ACY 39	MUL	Ge-PNP	6a	NF/S, 110V, 0.5A, 0.26W	-	3AX51E
ACY 40	MUL	Ge-PNP	6a	NF/S, 32V, 0.5A, 0.26W	AC 128 (2a), AC 153 (2a), ACY 33 (2a)	3AX55A
ACY 41	MUL	Ge-PNP	6a	NF/S, 21V, 0.5A, 0.26W	AC 128 (2a), AC 153 (2a), ACY 33 (2a)	3AX55A
ACY 44	MUL	Ge-PNP	6a	NF/S, 50V, 0.5A, 0.26W	AC 128 (2a), AC 153 (2a), ACY 24 (3), ACY 33 (2a)	3AX55A

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
ACY 50(IV-VI)	EIY	Ge-PNP	2	NF, 32V, 0.2A, B=30-150	AC 122 (4), AC 125 (2a), AC 151 (2a), ACY 32 (2a)	3AK32
ACY 51(V-VIII)	EIY	Ge-PNP	2	NF, 32V, 0.2A, B=50-300	AC 122 (4), AC 126 (2a), AC 151 (2a), ACY 32 (2a)	3AK32
ACY 51R	EIY	Ge-PNP	2	=ACY 51 ra	AC 151r (2a), AC 191 (2a), ACY 32 (2a)	3AX55A
ACY 52(V-VI)	EIY	Ge-PNP	2	NF, 60V, 0.2A, B=50-120	ACY 24 (3), ASY 48 (2a)	3AK34A
ACY 55(V-VIII)	EIY	Ge-PNP	2	NF, 32V, 0.3A, B=50-250	AC 128 (2a), AC 153 (2a), AC 193 (2a), ACY 33 (2a)	
ACZ 10	AEG	Ge-PNP	1	NF-E, 70V, 0.3A, 0.4W	ACY 24 (3), ACY 39 (6a), ASY 48 (2a)	3AK34A
AD 103(III-VI)	SIE	Ge-PNP	14	NF-L, 50V, 15A, 22.5W	AD 133 (13), AUY 29 (13), 2N1146 (12), 2N1554 (12)	3AD56A
AD 104(III-V)	SIE	Ge-PNP	14	NF-L, 65V, 10A, 22.5W	AUY 21 (13), 2N1146A (12), 2N1555 (12)	3AD56A
AD 106(II-V)	SIE	Ge-PNP	14	NF-L, 80V, 8A, 22.5W	AUY 22 (13), 2N1146B (12), 2N1556 (12), 2N3615 (12)	3AD56B
AD 130(III-V)	SIE	Ge-PNP	12	NF-L, 32V, 3A, 30W	AD 149 (12), AD 150 (12), AD 166 (12), 2N2143 (12), 2N2148	3AD56A
AD 131(III-V)	SIE	Ge-PNP	12	NF-L, 64V, 3A, 30W	AD 149 (12), AD 167 (12), 2N2145 (12), 2N2147 (12), AUY 19 (12)	3AD56A
AD 132(III-V)	SIE	Ge-PNP	12	NF-L, 80V, 3A, 30W	AD 167 (12), 2N2146 (12), 2N2147 (12), AUY 20 (12)	3AD56B
AD 133(III-V)	SIE	Ge-PNP	13	NF-L, 50V, 15A, 35W	AUY 29 (13), 2N1146 (12), 2N1554 (12)	3AD56A
AD 134(III-V)	SIE	Ge-PNP	13	NF-L, 65V, 10A, 22.5W	AUY 21 (13), 2N1146A (12), 2N1555 (12)	3AD56A
AD 136(II-IV)	SIE	Ge-PNP	13	NF-L, 80V, 8A, 22.5W	AUY 22 (13), 2N1146B (12), 2N1556 (12), 2N3615 (12)	3AD56B
AD 136(IV-VI)	AEG, SIE	Ge-PNP	15	S-L, 40V, 10A, 11W	AD 160 (15), AUY 18 (15)	3AD56A
AD 138	AEG	Ge-PNP	12	NF-L, 40V, 8A, 30W	AD 133 (13), AUY 29 (13), 2N2869 (12), 2N3614 (12)	3AD56A
AD 138/50	AEG	Ge-PNP	12	NF-L, 70V, 8A, 30W	AUY 22 (13), 2N1555 (12), 2N2870 (12), 2N3615 (12)	3AD56B
AD 139	AEG, ATE, MBL MOT, PHI, VAL	Ge-PNP	11	NF-L, 32V, 3.5A, 13W	AD 148 (11), AD 162 (11), AD 262 (11)	3AD50A
AD 140	AEI, MUL, PHI	Ge-PNP	12	NF-L, 65V, 3A, 35W	AD 149 (12), AD 167 (12), AUY 19 (12), 2N2145 (12), 2N2148 (12)	3AD54B
AD 142(4...6)	ATE	Ge-PNP	12	NF-L, 80V, 10A, 30W	AUY 22 (13), 2N1146B (12), 2N1556 (12), 2N3615 (12)	3AD56C
AD 143(4...6)	ATE	Ge-PNP	12	NF-L, 40V, 10A, 30W	AUY 21 (13), 2N1146 (12), 2N1554 (12), 2N3614 (12)	3AD56B
AD 143R(4...6)	ATE	Ge-PNP	12	NF-L, 32V, 10A, 30W	AD 133 (13), AUY 21 (13), 2N1553 (12), 2N3613 (12)	3AD56A
AD 145	ATE	Ge-PNP	12	NF-L, 20V, 10A, 30W	AD 133 (13), AUY 21 (13), 2N1553 (12), 2N3613 (12)	3AD56A
AD 148(IV-V)	ATE, DIT, SIE	Ge-PNP	11	NF-L, 32V, 3.5A, 13.5W	AD 162 (11), AD 262 (11)	3AD54A
AD 149(IV-V)	AEG, DIT, MBL, MOT, MUL, PHI, RTC, SIE, VAL	Ge-PNP	12	NF-L, 50V, 3.5A, 27.5W	AD 166 (12), 2N1540 (12), 2N2148 (12), 2N3617 (12)	3AD56A
AD 150(IV-V)	AEG, ATE, DIT, SIE	Ge-PNP	12	NF-L, 32V, 3.5A, 27.5W	AD 166 (12), 2N1539 (12), 2N2148 (12), 2N3614 (12)	3AD56A
AD 162	AEG, ATE	Ge-PNP	11	NF-L, 45V, 1A, 6W	AD 162 (11), AD 263 (11)	3AD50A
AD 163(X, Y)	DIT	Ge-PNP	12	NF-L, 40V, 3A, 33W	AD 149 (12), AD 166 (12), 2N2143 (12), 2N2148 (12), 2N1540 (12)	3AD56A
AD 165	AEG, ATE	Ge-PNP	11	NF-L, 25V, 1A, 6W	AD 162 (11), AD 262 (11)	3AD50A
AD 166(V-VII)	SIE	Ge-PNP	11	NF-L, 30V, 3A, 6W	AD 162 (11), AD 262 (11) kompl.: AD 157	3AD53A

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
AD 157(V-VII)	SIE	Ge-NPN	11	NF-L, 30V, 3A, 6W	AD 161 (11), AD 165 (11) kompl. AD 166	3AD50A
AD 159	AEG	Ge-PNP	15	S-L, 40V, 8A, 9W	AD 136 (15), AUY 18 (15)	3AD53A
AD 160	AEG	Ge-PNP	15	S-L, 40V, 10A, 9W	AD 136 (15), AUY 18 (15)	3AD58A
AD 161	AEG, DIT, MBL, MUL, PHI, RTC, SIE, VAL	Ge-NPN	11	NF-L, 32V, 1A, 6W	AD 165 (11) kompl. AD 162	3AD50A
AD 162 (V-VIII)	AEG, DIT, MBL, MUL, PHI, RTC, SIE, VAL	Ge-PNP	11	NF-L, 32V, 1A, 6W	AD 262 (11) kompl. AD 161	3AD50A
AD 163(III-IV)	SIE	Ge-PNP	12	NF-L, 100V, 3A, 30W	AUY 34 (12), 2N1543 (12), 2N2146 (12), 2N3618 (12)	3AD56C
AD 164	AEG	Ge-PNP	11	NF-L, 25V, 1A, 6W	AD 162 (11), AD 262 (11) kompl. AD 165	3AD50C
AD 165	AEG	Ge-NPN	11	NF-L, 25V, 1A, 6W	AD 161 (11) kompl. AD 164	3AD50C
AD 166	SIE	Ge-PNP	12	NF-L, 60V, 5A, 27.5W	2N1540 (12), 2N2148 (12), 2N3617 (12), AL 103 (12)	3AD56B
AD 167	SIE	Ge-PNP	12	NF-L, 75V, 5A, 27.5W	2N1541 (12), 2N2147 (12), 2N3618 (12), AL 102 (12)	3AD56C
AD 169	AEG	Ge-PNP	11	NF-L, 45V, 1A, 6W	AD 162 (11), AD 263 (11)	3AD50A
AD 262	ATE	Ge-PNP	11	NF-L, 35V, 4A, 10W	AD 162 (11) kompl. BD 162	3AD50A
AD 263	ATE	Ge-PNP	11	NF-L, 60V, 4A, 10W	- kompl. BD 163	3AD50B
AD 430	EIY	Ge-PNP	12	NF-L, 32V, 1.4A, 13.5W	AD 149 (12), AD 166 (12), 2N2137 (12), 2N2148 (12)	3AD50A
AD 431(IV-VII)	EIY	Ge-PNP	12	NF-L, 32V, 2A, 17W	AD 149 (12), AD 166 (12), 2N2142 (12), 2N2148 (12)	3AD50A
AD 432	EIY	Ge-PNP	12	NF-L, 32V, 1.5A, 20W	AD 149 (12), AD 166 (12), 2N2137 (12), 2N2148 (12)	3AD50A
AD 433	EIY	Ge-PNP	12	NF-L, 45V, 1.5A, 20W	AD 149 (12), AD 166 (12), 2N2138 (12), 2N2148 (12)	3AD50A
AD 434	EIY	Ge-PNP	12	NF-L, 45V, 3A, 20W	AD 149 (12), AD 166 (12), 2N2138 (12), 2N2148 (12)	3AD50A
AD 436(III-IV)	EIY	Ge-PNP	12	NF-L, 40V, 3.5A, 30W	AD 149 (12), AD 166 (12), 2N2138 (12), 2N2148 (12)	3AD50A
AD 437	EIY	Ge-PNP	12	NF-L, 64V, 3A, 20W	AD 167 (12), 2N2140 (12), 2N2147 (12)	3AD50A
AD 438	EIY	Ge-PNP	12	NF-L, 60V, 3A, 20W	AD 166 (12), 2N2138 (12), 2N2148 (12)	3AD50B
AD 439	EIY	Ge-PNP	12	NF-L, 80V, 3A, 20W	AD 167 (12), 2N2141 (12), 2N2147 (12)	3AD50C
AD 450	EIY	Ge-PNP	12	NF-L, 32V, 5A, 30W, B-14	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 451	EIY	Ge-PNP	12	NF-L, 32V, 5A, 30W, B-17	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 452	EIY	Ge-PNP	12	NF-L, 32V, 5A, 30W, B-30	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 453	EIY	Ge-PNP	12	NF-L, 35V, 5A, 30W, B-14	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 454	EIY	Ge-PNP	12	NF-L, 35V, 5A, 30W, B-17	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 455	EIY	Ge-PNP	12	NF-L, 35V, 5A, 30W, B-30	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 456	EIY	Ge-PNP	12	NF-L, 50V, 5A, 30W, B-14	AD 166 (12), 2N1535 (12), 2N2148 (12), 2N3612 (12)	3AD50B
AD 457	EIY	Ge-PNP	12	NF-L, 50V, 5A, 30W, B-25	AD 166 (12), 2N1535 (12), 2N2148 (12), 2N3612 (12)	3AD50B
AD 458	EIY	Ge-PNP	12	NF-L, 80V, 5A, 30W, B-11	AD 167 (12), 2N1536 (12), 2N2147 (12), 2N3615 (12)	3AD50B
AD 459	EIY	Ge-PNP	12	NF-L, 80V, 5A, 30W, B-20	AD 167 (12), 2N1536 (12), 2N2147 (12), 2N3615 (12)	3AD50B
AD 460	EIY	Ge-PNP	12	NF-L, 32V, 6A, 30W, B-13	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 461	EIY	Ge-PNP	12	NF-L, 32V, 6A, 30W, B-17	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 462	EIY	Ge-PNP	12	NF-L, 32V, 6A, 30W, B-30	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 463	EIY	Ge-PNP	12	NF-L, 35V, 6A, 30W, B-13	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 464	EIY	Ge-PNP	12	NF-L, 35V, 6A, 30W, B-17	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 465	EIY	Ge-PNP	12	NF-L, 35V, 6A, 30W, B-30	AD 166 (12), 2N1534 (12), 2N2148 (12), 2N3611 (12)	3AD50A
AD 466	EIY	Ge-PNP	12	NF-L, 50V, 6A, 30W, B-12	AD 166 (12), 2N1535 (12), 2N2148 (12), 2N3612 (12)	3AD50A
AD 467	EIY	Ge-PNP	12	NF-L, 50V, 6A, 30W, B-25	AD 166 (12), 2N1535 (12), 2N2148 (12), 2N3612 (12)	3AD50A
AD 468	EIY	Ge-PNP	12	NF-L, 70V, 6A, 30W, B-12	AD 167 (12), 2N1536 (12), 2N2147 (12), 2N3615 (12)	3AD50B
AD 469	EIY	Ge-PNP	12	NF-L, 70V, 6A, 30W, B-20	AD 167 (12), 2N1536 (12), 2N2147 (12), 2N3615 (12)	3AD50B
AD 541	EIY	Ge-PNP	26	NF-L, 25V, 10A, 45W	ADZ 11 (26), 2N1099 (26), 2N2078 (26)	3AD50C
AD 542	EIY	Ge-PNP	26	NF-L, 80V, 10A, 45W	ADZ 12 (26), 2N1099 (26), 2N2075 (26)	3AD58A
AD 545	EIY	Ge-PNP	26	NF-L, 60V, 15A, 45W	ADZ 11 (26), 2N1099 (26), 2N2078 (26)	3AD58A
AD 1202	TSM	Ge-PNP	12	NF-L, 45V, 3A, 13.5W	AD 149 (12), AD 166 (12), 2N1535 (12), 2N2148 (12)	3AD50A
AD 1203	TSM	Ge-PNP	12	NF-L, 60V, 3A, 13.5W	AD 167 (12), 2N1536 (12), 2N2147 (12)	3AD50B

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
ADY 10	SIE	Ge-PNP	15a	NF, 32V, 0.6A, 0.25W, B>14	AD 162 (11), AD 262 (11), TF 78/30 (15a)	
ADY 11	SIE	Ge-PNP	15a	NF, 60V, 0.6A, 0.25W, B>10	AD 263 (11), TF 78/60 (15a)	
ADY 12	SIE	Ge-PNP	15a	NF, 32V, 0.6A, 0.25W, B>22	AD 162 (11), AD 262 (11), TF 78/30 (15a)	
ADY 13	SIE	Ge-PNP	15a	NF, 60V, 0.6A, 0.25W, B>14	AD 263 (11), TF 78/60 (15a)	
ADY 14	SIE	Ge-PNP	14a	NF, 65V, 3A, 6W, B>20	AD 149 (12), AD 166 (12), 2N2145 (12), 2N2147 (12)	
ADY 15	SIE	Ge-PNP	14a	NF, 80V, 3A, 6W, B>15	AD 167 (12), AUY 20 (12), 2N2146 (12), 2N2147 (12)	
ADY 16	SIE	Ge-PNP	14a	NF, 80V, 3A, 6W, B>20	AD 167 (12), AUY 20 (12), 2N2146 (12), 2N2147 (12)	
ADY 19	SIE	Ge-PNP	15a	NF, 32V, 0.6A, 0.25W, B>35	AD 162 (11), AD 262 (11), TF 78/30 (15a)	
ADY 20	SIE	Ge-PNP	15a	NF, 60V, 0.6A, 0.25W, B>22	AD 263 (11), TF 78/60 (15a)	
ADY 21	SIE	Ge-PNP	15a	NF, 60V, 0.6A, 0.25W, B>35	AD 263 (11), TF 78/60 (15a)	
ADY 22	ITT	Ge-PNP	12	NF-L, 30V, 10A, 40W	AUY 21 (13), 2N1553 (12), 2N2869 (12), 2N3611 (12)	3AD56A
ADY 23	ITT	Ge-PNP	12	NF-L, 80V, 10A, 40W	AUY 22 (13), 2N1555 (12), 2N2870 (12), 2N3617 (12)	3AD56B
ADY 24	ITT	Ge-PNP	12	NF-L, 80V, 10A, 40W	AUY 22 (13), 2N1559 (12), 2N2870 (12), 2N3617 (12)	3AD56B
ADY 25	ITT	Ge-PNP	12	NF-L, 100V, 7.5A, 40W	2N1556 (12), 2N3618 (12)	3AD56C
ADY 26	MBL, MUL, VAL	Ge-PNP	26	NF/S-L, 80V, 25A, 100W	ADZ 12 (26), 2N2159 (26)	3AD57B
ADY 27(IV, V)	SIE	Ge-PNP	12	NF-L, 32V, 3.5A, 27.5W	AD 149 (12), AD 166 (12), AUY 19 (12), 2N1544 (12), 2N2148 (12)	3AD56A
ADY 28(IX, Y)	DIT	Ge-PNP	12	NF-L, 80V, 6A, 33W	AD 167 (12), AUY 22 (13), AUY 28 (12), 2N2147 (12), 2N3617 (12)	3AD56B
ADY 30	RTC	Ge-PNP	26	NF-L, 45V, 50A, 150W	2N4048 (26), 2N4051 (26)	3AD57A
ADY 31	RTC	Ge-PNP	26	NF-L, 60V, 150A, 85W	—	
ADY 32	RTC	Ge-PNP	26	NF-L, 80V, 180A, 35W	—	
ADZ 11	MUL, VAL	Ge-PNP	26	NF/S-L, 50V, 15A, 45W	2N1099 (26), 2N2080 (26)	3AD56A
ADZ 12	MUL, VAL	Ge-PNP	26	NF/S-L, 80V, 15A, 45W	2N1098 (26), 2N2079 (26)	3AD56B
AF 101 (ws, or, bl, vi)	AEG	Ge-PNP	1	AM-V/M/O/ZF, 10MHz	AF 121 (5a), AF 127 (5a), AF 200 (5a)	3AK20A
AF 102	VAL	Ge-PNP	10	VHF-V/M/O, 180MHz	AF 106 (5), AF 306 (21a)	3AG53D
AF 105	AEG	Ge-PNP	1	AM/FM-ZF, 22MHz	AF 121 (5a), AF 126 (5a), AF 200 (5a)	3AG55A
AF 106 (A)	AEG, SIE, VAL	Ge-PNP	5	VHF-V/M/O, 220MHz	AF 121 (5a), AF 306 (21a)	3AG53D
AF 107	SIE	Ge-PNP	16	VHF-V/M/O, 330MHz	AF 109R (5)	3AG87B
AF 108	SIE	Ge-PNP	16	VHF-V/M/O, 330MHz	AF 109R (5)	3AG87B
AF 108 (R)	AEG, ATE, SIE, VAL	Ge-PNP	5	VHF-V-re, 260MHz	AF 139 (5), AF 239 (5)	3AG53D
AF 110	SIE, VAL	Ge-PNP	5	ZF-re	AF 121 (5a), AF 126 (5a), AF 200 (5a)	
AF 111	ITT	Ge-PNP	2a	AM-V/M/ZF, 50MHz	AF 127 (5a), AF 200 (5a)	3AG53B
AF 112	ITT	Ge-PNP	2a	AM/FM-V/M/ZF, 60MHz	AF 126 (5a), AF 200 (5a)	3AG53C
AF 113	ITT	Ge-PNP	2a	FM-V/M/ZF, 80MHz	AF 125 (5a), AF 200 (5a)	3AG53C
AF 114	MUL, SIE, VAL	Ge-PNP	10	FM-V, 75MHz	AF 124 (5a), AF 200 (5a)	3AG53C
AF 115	MUL, SIE, VAL	Ge-PNP	10	FM-M, 75 MHz	AF 125 (5a), AF 200 (5a)	3AG53C
AF 116	MUL, SIE, VAL	Ge-PNP	10	AM/FM-V/M/ZF, 75MHz	AF 126 (5a), AF 200 (5a)	3AG53C
AF 117	MUL, SIE, VAL	Ge-PNP	10	AM-V/M/ZF, 75MHz	AF 127 (5a), AF 200 (5a)	3AG53C
AF 118	MUL, SIE, VAL	Ge-PNP	10	HF/V/d, 70V, 175MHz	SFT 162 (2b), 2SA250 (2), 2SA358 (2)	3AG84
AF 121 (/07)	AEG, MUL, VAL	Ge-PNP	5a	AM/FM-V/M/ZF, 270MHz	AF 200 (5a), AF 201 (5a)	3AG54E
AF 121S	VAL	Ge-PNP	5a	TV-ZF, 32V, 270MHz	AF 201 (5a), AF 202(S/L) (5a)	3AG55C
AF 122(gp, bi)	AEG	Ge-PNP	4	VHF-V/M/O, 275MHz	AF 106 (5), AF 109R (5)	3AG53E
AF 124	MBL, MUL, PHI, RTC, SIE, VAL	Ge-PNP	5a	FM-V, 75MHz	AF 200 (5a)	3AG53C
AF 125	MBL, MUL, PHI, RTC, SIE, VAL	Ge-PNP	5a	FM-M, 75MHz	AF 200 (5a)	3AG53C
AF 126	MBL, MUL, PHI, RTC, SIE, VAL	Ge-PNP	5a	AM/FM-V/M/ZF, 75MHz	AF 200 (5a)	3AG53C
AF 127	MBL, MUL, PHI, RTC, SIE, VAL	Ge-PNP	5a	AM-V/M/ZF, 75MHz	AF 200 (5a)	3AG53C
AF 128 (gp, vi, sw)	AEG	Ge-PNP	9	Min-HF, 6MHz	AF 127 (5a), AF 200 (5a)	3AG53A

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
AF 129	ITT	Ge-PNP	5a	FM-V, 150MHz	AF 121 (5a), AF 124 (5a), AF 200 (5a)	3AG53D
AF 130	ITT	Ge-PNP	5a	FM-M, 150MHz	AF 124 (5a), AF 200 (5a)	3AG53D
AF 131	ITT	Ge-PNP	5a	AM-V/M, 100MHz	AF 125 (5a), AF 200 (5a)	3AG53C
AF 132	ITT	Ge-PNP	5a	AM/FM ZF, 90MHz	AF 126 (5a), AF 200 (5a)	3AG53C
AF 133	ITT	Ge-PNP	5a	AM-V/M/ZF, 100MHz	AF 127 (5a), AF 200 (5a)	3AG53C
AF 134	AEG	Ge-PNP	5	FM-V, 55MHz	AF 124 (5a), AF 200 (5a)	3AG53B
AF 135	AEG	Ge-PNP	5	FM-M, 50MHz	AF 125 (5a), AF 200 (5a)	3AG53B
AF 136	AEG	Ge-PNP	5	AM-V/M/O, 40MHz	AF 126 (5a), AF 200 (5a)	3AG53B
AF 137	AEG	Ge-PNP	5	AM/FM ZF, 35MHz	AF 126 (5a), AF 200 (5a)	3AG53B
AF 138	AEG	Ge-PNP	5	AM/FM ZF re, 40MHz	AF 126 (5a), AF 200 (5a)	3AG53B
AF 139	AEG, ATE, MBL, MOT, MUL, PHI, RTC, SIE, VAL	Ge-PNP	5	UHF-V/M/O, 550MHz	AF 239(S) (5)	3AG80D
AF 142	ATE	Ge-PNP	10	FM-V, 150MHz	AF 124 (5a), AF 200 (5a)	3AG54D
AF 143	ATE	Ge-PNP	10	FM-M, 130MHz	AF 125 (5a), AF 200 (5a)	3AG54D
AF 144	ATE	Ge-PNP	10	AM/FM V/M/ZF, 130MHz	AF 126 (5a), AF 200 (5a)	3AG54D
AF 146	ATE	Ge-PNP	10	AM/FM V/M/ZF	AF 125 (5a), AF 200 (5a)	3AG54A
AF 147	ATE	Ge-PNP	10	AM/FM ZF	AF 126 (5a), AF 127 (5a), AF 200 (5a)	3AG54A
AF 148	ATE	Ge-PNP	10	AM/FM ZF	AF 126 (5a), AF 127 (5a), AF 200 (5a)	3AG54A
AF 149	ATE	Ge-PNP	10	AM/FM-V/M/ZF	AF 126 (5a), AF 200 (5a)	3AG54A
AF 150	ATE	Ge-PNP	10	AM-V/M/ZF	AF 126 (5a), AF 127 (5a), AF 200 (5a)	3AG54A
AF 164	ATE	Ge-PNP	2b	FM-V, 150MHz	AF 124 (5a), AF 200 (5a)	3AG54D
AF 165	ATE	Ge-PNP	2b	FM-M, 130MHz	AF 125 (5a), AF 200 (5a)	3AG54D
AF 166	ATE	Ge-PNP	2b	AM/FM-V/M/ZF, 80MHz	AF 126 (5a), AF 200 (5a)	3AG54D
AF 168	ATE	Ge-PNP	2b	FM-M:ZF	AF 125 (5a), AF 200 (5a)	3AG54A
AF 169	ATE	Ge-PNP	2b	AM-V/M/ZF	AF 126 (5a), AF 127 (5a), AF 200 (5a)	3AG54A
AF 170	ATE	Ge-PNP	2b	AM-V/M/O/ZF, 60MHz	AF 126 (5a), AF 127 (5a), AF 200 (5a)	3AG54C
AF 171	ATE	Ge-PNP	2b	AM-V/ZF	AF 126 (5a), AF 200 (5a)	3AG54A
AF 172	ATE	Ge-PNP	2b	AM-V/M/O/ZF, 60MHz	AF 127 (5a), AF 200 (5a)	3AG54C
AF 178	AEG, MUL, VAL	Ge-PNP	7	VHF-V/M/O, 180MHz	AF 106 (5), AF 306 (21a)	3AG54D
AF 179	MUL, PHI	Ge-PNP	7	VHF-V/M/O, 270MHz	AF 109R (5)	3AG54D
AF 180	MBL, MUL, VAL	Ge-PNP	7	VHF-V re, 250MHz	AF 106 (5), AF 109R (5), AF 306 (21a)	3AG54E
AF 181	AEG, MUL, VAL	Ge-PNP	7	TV ZF re, 170MHz	AF 121 (5a), AF 200 (5a)	3AG54D
AF 182	DIT	Ge-PNP	2b	Vid-Tr, 15V, >120MHz	AF 121 (5a), AF 200 (5a), AF 201 (5a)	3AG54D
AF 185	PHI, VAL	Ge-PNP	7	AM-V/M/O/ZF, 80MHz	AF 106 (5), AF 121 (5a), AF 200 (5a), AF 201 (5a)	3AG54C
AF 186	MUL, PHI	Ge-PNP	7	UHF-V/M/O	AF 138 (5), AF 239(S) (5)	3AG54A
AF 187	DIT, MIS	Ge-PNP	2	NF/HF, 18V, 0.1A, 7MHz	AC 122 (4), AC 125 (2a), AC 151 (2a), AF 127 (5a), AF 200 (5a)	3AG46
AF 188	DIT, MIS	Ge-PNP	2	NF/HF, 18V, 0.1A, 13MHz	AC 122 (4), AC 126 (2a), AC 151 (2a), AF 127 (5a), AF 200 (5a)	3AG46
AF 189	DIT, MIS	Ge-PNP	2	NF/HF, 18V, 0.1A, 7MHz	AC 122 (4), AC 125 (2a), AC 151 (2a), AF 127 (5a), AF 200 (5a)	3AG46
AF 190	DIT, MIS	Ge-PNP	2	NF/HF, 18V, 0.1A, 13MHz	AC 122 (4), AC 126 (2a), AC 151 (2a), AF 127 (5a), AF 200 (5a)	3AG46
AF 192	DIT	Ge-PNP	5	symm, 10V, 0.1A	AC 130 (2a), AC 190	3BX1D
AF 193	DIT	Ge-PNP	2	TV-ZF, 40MHz	AF 126 (5a), AF 200 (5a)	3AG54B
AF 194	DIT	Ge-PNP	2b	FM-V, 110MHz	AF 124 (5a), AF 200 (5a)	3AG54D
AF 195	DIT	Ge-PNP	2b	FM-M, 85MHz	AF 125 (5a), AF 200 (5a)	3AG54C
AF 196	DIT	Ge-PNP	2b	AM/FM-V/M/ZF, 80MHz	AF 126 (5a), AF 200 (5a)	3AG54C
AF 197	DIT	Ge-PNP	2b	AM-V/M/O/ZF, >80MHz	AF 127 (5a), AF 200 (5a)	3AG54C
AF 198	DIT	Ge-PNP	2b	FM-ZF re, >80MHz	AF 127 (5a), AF 200 (5a)	3AG54C
AF 200 (U)	ATE, SIE	Ge-PNP	5a	TV-ZF re	AF 121 (5a)	3AG87A
AF 201 (U)	ATE, SIE	Ge-PNP	5a	TV-ZF	AF 121 (5a)	3AG87A
AF 202 (S/L)	ATE, SIE	Ge-PNP	5a	TV-ZF	AF 121 (5) (5a)	3AG87A
AF 239 (S)	AEG, ATE, MBL, MOT, MUL, PHI, RTC, SIE, VAL	Ge-PNP	5	UHF-V/M/O, 700MHz		3AG80D
AF 240 (S)	AEG, ATE, MBL, PHI, SIE, VAL	Ge-PNP	5	UHF-M/O, 800MHz	AF 239(S) (5)	3AG80D
AF 250	VAL	Ge-PNP	5	UHF-V	AF 239(S) (5)	
AF 251	AEG	Ge-PNP	20b	UHF-V, 780MHz	AF 239(S) (5)	3AG95B
AF 252	AEG	Ge-PNP	20b	UHF-M, 660MHz	AF 239(S) (5), AF 240(S) (5)	3AG95B
AF 253	AEG	Ge-PNP	20b	VHF-V re, 580MHz	AF 109R (5)	3AG95C
AF 254	AEG	Ge-PNP		UHF	AF 239(S) (5), AF 240(S) (5)	3AG54A
AF 256	AEG	Ge-PNP	20	VHF-V/M/O, >170MHz	AF 106 (5), AF 306 (21a)	3AG54E
AF 257	AEG	Ge-PNP	(S)	Min-VHF, >170MHz	AF 306 (21a)	3AG53E

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
AF 260 AF 261	EIY EIY	Ge-PNP Ge-PNP	4 4	AM/FM ZF, B=25-150 AM/FM ZF, B=45-250	AF 126 (5a), AF 200 (5a), AF 201 (5a) AF 126 (5a), AF 200 (5a), AF 201 (5a)	3AG54A 3AG54A
AF 263	AEG	Ge-PNP	39c	VHF V-re, 550MHz	AF 109R (5)	
AF 264	AEG	Ge-PNP	39c	VHF V-M/O, >170MHz	AF 106 (5), AF 109R (5), AF 306 (21a)	3AG54E
AF 265 AF 266	EIY EIY	Ge-PNP Ge-PNP	4 4	S, 18V, 0.1A, B=20-80 S, 18V, 0.1A, B=50-200	AC 122 (4), AC 125 (2a), AC 151 (2a), AC 192 (2a) AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG46 3AG46
AF 267 AF 269	MBL, RTC, VAL VAL	Ge-PNP Ge-PNP	17 17	UHF V/M, 780MHz UHF-M, 550MHz	AF 279 (17), AF 280 (17), AF 367 (17), AF 369 (17) AF 279 (17), AF 280 (17), AF 367 (17), AF 369 (17)	3AG95B 3AG80D
AF 271 AF 272	EIY EIY	Ge-PNP Ge-PNP	4 4	HF, 30MHz HF, 40MHz	AF 125 (5a), AF 126 (5a), AF 200 (5a), AF 201 (5a) AF 125 (5a), AF 126 (5a), AF 200 (5a), AF 201 (5a)	3AG53A 3AG53B
AF 275	EIY	Ge-PNP	4	HF, 35MHz	AF 125 (5a), AF 126 (5a), AF 200 (5a), AF 201 (5a)	3AG53B
AF 279 (S) AF 280	AEG, SIE, VAL AEG, SIE, VAL	Ge-PNP Ge-PNP	17 17	UHF-V, 780MHz UHF-M/O, 550MHz	AF 267 (17), AF 367 (17) AF 267 (17), AF 269 (17), AF 367 (17), AF 369 (17)	3AG95B 3AG80D
AF 280	EIY	Ge-PNP	4	HF/ZF, 40MHz	AF 125 (5a), AF 126 (5a), AF 200 (5a), AF 201 (5a)	3AG80D
AF 282	EIY	Ge-PNP	4	HF, 80MHz	AF 125 (5a), AF 126 (5a), AF 200 (5a), AF 201 (5a)	3AG53C
AF 284	EIY	Ge-PNP	4	HF, 80MHz	AF 125 (5a), AF 126 (5a), AF 200 (5a), AF 201 (5a)	
AF 306	SIE, VAL	Ge-PNP	21a	VHF V-M/O, 500MHz	AF 106 (5), AF 109R (5)	3AG54E
AF 339	SIE	Ge-PNP	21a	VHF V-re, 750MHz	AF 109R (5), AF 306 (21a)	
AF 367 AF 369	PHI, VAL PHI, VAL	Ge-PNP Ge-PNP	17 17	UHF-V, 800MHz UHF-M/O, 550MHz	AF 267 (17), AF 279 (17) AF 267 (17), AF 279 (17), AF 269 (17), AF 280 (17)	3AG95C 3AG80D
AF 379	PHI, SIE, VAL	Ge-PNP	17	UHF V, 1250MHz	-	3AG95C
AFY 10 AFY 11	SIE SIE	Ge-PNP Ge-PNP	6 6	HF/VHF, 250MHz HF/VHF, 300MHz	AFY 18 (6), AFY 19 (6), 2N1141-43 (6) AFY 18 (6), AFY 19 (6), 2N1141-43 (6)	3AG64 3AG64
AFY 12	AEG, ATE, SIE	Ge-PNP	5	VHF V-M/O, 230MHz	AF 106 (5), AF 109R (5), AF 306 (21a)	3AG53E
AFY 13	AEG	Ge-PNP	5	HF-V/M/O/ZF, 50MHz	AF 125 (5a), AF 200 (5a), AF 201 (5a)	3AK1
AFY 14	AEG	Ge-PNP	3	HF-Tr, 60MHz	AFY 18 (6), AFY 19 (6), 2N3323-25 (4a)	3AK33
AFY 15	AEG	Ge-PNP	4	HF Tr, 16MHz	AFY 18 (6), AFY 19 (6), 2N3323-25 (4a)	3AK1
AFY 16	AEG, ATE, MBL, PHI, SIE, VAL	Ge-PNP	5	UHF-V/M/O, 550MHz	AF 139 (5), AF 239 (5) (5)	3AG87B
AFY 17	SIE	Ge-PNP	5	VHF/UHF, >250MHz	AF 139 (5), AF 239 (5) (5)	
AFY 18(C,D,E) (IV-VII)	SIE	Ge-PNP	6	VHF-AV, 600MHz	2N1141-42 (6)	3AK33B
AFY 19	MOT, MUL, VAL	Ge-PNP	6	FM/VHF Tr, 0.4W/180MHz	-	
AFY 20 AFY 21 AFY 22 AFY 23 AFY 24	SIE SIE SIE SIE SIE	Ge-PNP Ge-PNP Ge-PNP Ge-PNP Ge-PNP	2a 2a 2a 2a 2a	HF, 20V, 0.1A, >2.5MHz HF, 20V, 0.1A, >5MHz HF, 20V, 0.1A, >5MHz HF, 20V, 0.1A, >10MHz HF, 20V, 0.1A, >10MHz	AFY 18 (6), 2N3323-25 (4a) AFY 18 (6), 2N3323-25 (4a) AFY 18 (6), 2N3323-25 (4a) AFY 18 (6), 2N3323-25 (4a) AFY 18 (6), 2N3323-25 (4a)	
AFY 25 AFY 26	AEG AEG	Ge-PNP Ge-PNP	6a 6a	UHF V, 1800MHz UHF-M/O, 1600MHz	AFY 34 AFY 34	3AG98D 3AG98D
AFY 29	AEG	Ge-PNP	5	HF/ZF, 35MHz	AF 126 (5a), AF 200 (5a), AF 201 (5a)	3AK1
AFY 30 AFY 31 AFY 32	SIE SIE SIE	Ge-PNP Ge-PNP Ge-PNP	6 6 6	HF, 30V, 0.1A, >200MHz HF, 30V, 0.1A, >200MHz HF, 30V, 0.1A, >200MHz	AFY 18 (6), 2N1141-42 (6) AFY 18 (6), 2N1141-42 (6) AFY 18 (6), 2N1141-42 (6)	
AFY 33	SIE	Ge-PNP	6	HF/ZF, >200MHz	AFY 18 (6), 2N1141-42 (6)	
AFY 34	SIE	Ge-PNP	sp	UHF, 1500MHz	AFY 25 (6a), AFY 26 (6a)	
AFY 35 AFY 36	SIE SIE	Ge-PNP Ge-PNP	6 6	HF, 30V, 0.05A, >300MHz HF, 30V, 0.05A, >300MHz	AFY 18 (6), 2N1141-42 (6) AFY 18 (6), 2N1141-42 (6)	

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内 代换型号
AFY 37	SIE	Ge-PNP	5	VHF/UHF AV, 600MHz	AF 239S (5), AFY 40 (5)	3AG95B
AFY 38	SIE	Ge-PNP	5	VHF-ra, >190MHz	AF 106 (5), AF 109R (5), AF 306 (21a)	
AFY 39	SIE	Ge-PNP	5a	VHF AV, 600MHz	AF 202S/L (5a), AFY 40 (5)	3AG87B
AFY 40	VAL	Ge-PNP	5	UHF AV, 700MHz	AF 239S (5), AFY 37 (5)	3AG95B
AFY 40R	VAL	Ge-PNP	5	UHF AV, 600MHz	AF 239S (5), AFY 37 (5)	3AG95B
AFY 41	VAL	Ge-PNP	5	UHF V/M/O, 650MHz	AF 239S (5), AFY 40 (5)	3AG95B
AFY 42 (R)	SIE	Ge-PNP	5	UHF-V/M/O, 700MHz	AF 239(S) (5), AFY 40 (5)	3AG95B
AFY 60	EIY	Ge-PNP	4	HF, 4.5MHz	AF 126 (5a), AF 127 (5a), AF 200 (5a), AF 201 (5a)	3AG54A
AFY 61	EIY	Ge-PNP	4	HF, 10MHz	AF 126 (5a), AF 127 (5a), AF 200 (5a), AF 201 (5a)	3AG54A
AFY 66	EIY	Ge-PNP	4	HF, 8MHz	AF 202S/L (5a), 2N3323-25 (4a)	3AG46
AFY 71	EIY	Ge-PNP	4	HF, 30MHz	AF 126 (5a), AF 127 (5a), AF 200 (5a), AF 201 (5a)	3AG53A
AFY 75	EIY	Ge-PNP	4	HF, 35MHz	AF 126 (5a), AF 127 (5a), AF 200 (5a), AF 201 (5a)	3AG53A
AFZ 10	AEG	Ge-PNP	1	AM Tr, 35MHz	AFY 18 (6), AFY 19 (6), 2N3323-25 (4a)	3AK32
AFZ 11	MUL	Ge-PNP	5a	HF, 140MHz	AF 106 (5), AF 109R (6), AF 306 (21a)	3AG54D
AFZ 12	MUL, PHI, VAL	Ge-PNP	5a	HF, 180MHz	AF 106 (5), AF 109R (6), AF 306 (21a)	3AG53D
AL 100(4..6) AL 101	ATE ATE	Ge-PNP Ge-PNP	12 12	NF L, 130V, 10A, 30W NF L, 100V, 10A, 30W	AUY 38 (12), 2N1548 (12), 2N1906 (12), 2N2528 (12) AUY 38 (12), 2N1547 (12), 2N1905 (12), 2N2527 (12)	3AD56C
AL 102(4..6) AL 103(4..6)	ATE ATE	Ge-PNP Ge-PNP	12 12	NF L, 130V, 6A, 30W NF L, 100V, 6A, 30W	AUY 38 (12), 2N1548 (12), 2N1906 (12), 2N2528 (12) AUY 38 (12), 2N1547 (12), 2N1905 (12), 2N2527 (12)	3AD56C
AL 112 AL 113	ATE ATE	Ge-PNP Ge-PNP	11 11	NF L, 130V, 6A, 10W NF L, 100V, 6A, 10W	- -	3AD50A 3AD50B
ALZ 10	AEG	Ge-PNP	33	NF-E, 50V, 0.25A, 0.5W	AC 128K (3), AC 153K (3), AC 193K (3)	3AK34A
APY ...	Foto-Transistoren					

型 号	生产厂	材料	外形	简明参数	国外代换型号与备注	国内代换型号
ASY 10	SIE	Ge-PNP	2a	NF/S, 32V, 0.3A, B=30-50	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 11	SIE	Ge-PNP	2a	NF/S, 32V, 0.3A, B=40-70	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 12 (1, 2)	ITT	Ge-PNP	18	NF/S, 32V, 0.6A, 0.135W	AC 128 (2a), AC 153 (2a), AC 193 (2a)	3AX55A
ASY 13 (1, 2)	ITT	Ge-PNP	18	NF/S, 60V, 0.6A, 0.135W	ACY 24 (3), ASY 48 (2a), ASY 77 (6a)	3AX55A
ASY 14 (1, 3)	ITT	Ge-PNP	18	NF/S, 60V, 0.25A, 0.13W	ACY 24 (3), ASY 48 (2a), ASY 77 (6a), ACY 39 (6a)	3AX54D
ASY 23	VAL	Ge-PNP	6	NF/S, 80V, 0.3A, 0.85W	ACY 24 (3), ASY 48 (2a), ASY 77 (6a), ACY 39 (6a)	3AX54D
ASY 24	AEG	Ge-PNP	4	NF/S, 50V, 0.25A, 0.1W	AC 122/30 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a), ASY 48 (2a)	3AK34A
ASY 24B	AEG	Ge-PNP	4	NF/S, 35V, 0.25A, 0.1W	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a), ASY 48 (2a)	3AK34A
ASY 25	SIE	Ge-PNP	2a	NF/S, 32V, 0.3A, 0.15W	AC 128 (2a), AC 153 (2a), AC 193 (2a)	
ASY 26 (RT)	AEG, DIT, MBL	Ge-PNP	6a	NF/S, 30V, 0.2A, 0.15W	ASY 48 (2a), ASY 76 (6a), ASY 80 (6a), ASY 90 (2a) kompl.: ASY 28	3AK32
ASY 27 (RT)	MIS, MUL, PHI, RTC, SIE, VAL	Ge-PNP	6a	NF/S, 25V, 0.2A, 0.15W	ASY 48 (2a), ASY 76 (6a), ASY 80 (6a), ASY 91 (2a) kompl.: ASY 29	3AK32
ASY 28 (RT)	AEG, DIT, MBL	Ge-NPN	6a	NF/S, 30V, 0.2A, 0.15W	ASY 73-75 (6a) kompl.: ASY 26	
ASY 29 (RT)	MUL, PHI, RTC, SIE, VAL	Ge-NPN	6a	NF/S, 25V, 0.2A, 0.15W	ASY 73-75 (6a) kompl.: ASY 27	3BX1D
ASY 30	AEG	Ge-PNP	3	NF/S, 50V, 0.25A, 0.2W	ACY 24 (3), ASY 48 (2a), ASY 77 (6a)	3AK34A
ASY 31	MBL, PHI, VAL	Ge-PNP	1	NF/S, 25V, 0.1A, B=30-80	ASY 26 (6a), ASY 27 (6a), ASY 48 (2a), ASY 76 (6a), ASY 80 (6a)	
ASY 32	MBL, PHI, VAL	Ge-PNP	1	NF/S, 25V, 0.1A, B=50-150	ASY 26 (6a), ASY 27 (6a), ASY 48 (2a), ASY 76 (6a), ASY 80 (6a)	3AX51D
ASY 33	SIE	Ge-PNP	2a	NF/S, 32V, 0.3A, 0.15W	ASY 26 (6a), ASY 48 (2a), ASY 76 (6a), ASY 80 (6a)	
ASY 37	SIE	Ge-PNP	2a	NF/S, 64V, 0.3A, 0.15W	ASY 48 (2a), ASY 77 (6a)	3AK32
ASY 48 (IV-VI)	SIE	Ge-PNP	2a	NF/S, 64V, 0.3A, 0.9W	ACY 24 (3), ASY 77 (6a)	3AX55A
ASY 49	ITT	Ge-PNP	32	NF/S, 100V, 0.25A, 0.09W	ACY 39 (6a)	3AX54C
ASY 50	ITT	Ge-PNP	32	NF/S, 20V, 0.5A, 0.2W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: ASY 53	3AX 53A
ASY 51	ITT	Ge-PNP	32	NF/S, 60V, 0.25A, B>30	ACY 24 (3), ASY 48 (2a), ASY 77 (6a)	3AX54C
ASY 52	ITT	Ge-PNP	32	NF/S, 60V, 0.25A, B=35	ACY 24 (3), ASY 48 (2a), ASY 77 (6a)	3AX54C
ASY 53	ITT	Ge-NPN	32	NF/S, 20V, 0.25A, 0.1W	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (4a) kompl.: ASY 5	
ASY 54	ITT	Ge-PNP	32	NF/S, 30V, 0.5A, 0.2W	AC 128 (2a), AC 153 (2a), AC 193 (2a) kompl.: ASY 61	
ASY 54N	NEW	Ge-PNP	8	NF/S, 30V, 0.5A, 0.15W	AC 128 (2a), AC 153 (2a), AC 193 (2a)	
ASY 55	ITT	Ge-PNP	32	NF/S, 20V, 0.5A, 0.2W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a) kompl.: ASY 62	
ASY 55N	NEW	Ge-PNP	8	NF/S, 20V, 0.5A, 0.15W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	
ASY 56	ITT	Ge-PNP	32	NF/S, 16V, 0.2A, B=25-60	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 56N	NEW	Ge-PNP	8	NF/S, 16V, 0.2A, B=25-60	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 57	ITT	Ge-PNP	32	NF/S, 16V, 0.2A, B=30-80	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 57N	NEW	Ge-PNP	8	NF/S, 16V, 0.2A, B=30-80	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 58	ITT	Ge-PNP	32	NF/S, 16V, 0.2A, B=40-100	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 58N	NEW	Ge-PNP	8	NF/S, 16V, 0.2A, B=40-100	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 59	ITT	Ge-PNP	32	NF/S, 16V, 0.2A, B=60-150	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 59N	NEW	Ge-PNP	8	NF/S, 16V, 0.2A, B=60-150	AC 122 (4), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG87A
ASY 60	ITT	Ge-PNP	32	NF/S, 20V, 0.5A, 0.2W	AC 128 (2a), AC 153 (2a), AC 188 (2a), AC 193 (2a)	3AG87A
ASY 61	ITT	Ge-NPN	32	NF/S, 30V, 0.25A, 0.1W	AC 127 (2a), AC 176 (2a), AC 194 (2a) kompl.: ASY 54	3BX81B
ASY 62	ITT	Ge-NPN	32	NF/S, 20V, 0.25A, 0.1W	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a) kompl.: ASY 55	3BX81B
ASY 63	ITT	Ge-PNP	32	NF/S, 26V, 0.2W	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	
ASY 63N	NEW	Ge-PNP	8	NF/S, 26V, 0.15W	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53C
ASY 64	ITT	Ge-PNP	32	NF/S, 30V, 0.2W	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AX53C
ASY 66	ITT	Ge-PNP	32	NF/S, 30V, 0.2W	AC 122 (4), AC 125 (2a), AC 126 (2a), AC 151 (2a), AC 192 (2a)	3AG87B
ASY 67	MUL	Ge-PNP	7	NF/S, 50V, 0.08A	AF 202S/L (5a), 2N1141 (8)	3AG63
ASY 68	SIE	Ge-PNP	2a	NF/S, 12V, 0.1A, 75mW	ASY 26 (6a), ASY 27 (6a)	
ASY 69	SIE	Ge-PNP	2a	NF/S, 20V, 0.35A, 75mW	ASY 26 (6a), ASY 27 (6a)	
ASY 70 (IV-VI)	SIE	Ge-PNP	2a	NF/S, 32V, 0.3A, 0.9W	ASY 26 (6a), ASY 48 (2a), ASY 76 (6a), ASY 80 (6a)	2Z800A
ASY 71	VAL	Ge-PNP	32	NF/S, 100V, 0.15W	ACY 39 (6a)	3AX54C
ASY 72	ITT	Ge-NPN	32	NF/S, 20V, 0.25A, 0.1W	AC 127 (2a), AC 176 (2a), AC 187 (2a), AC 194 (2a), ASY 28 (6a)	3BG1
ASY 73 (RT)	PHI, RTC, VAL	Ge-NPN	6a	S-symm, 30V, 0.4A, B>25	ASY 28 (6a), ASY 29 (6a)	3BX81C
ASY 74 (RT)	PHI, RTC, VAL	Ge-NPN	6a	S-symm, 30V, 0.4A, B>40	ASY 28 (6a), ASY 29 (6a)	3BG1
ASY 75 (RT)	PHI, RTC, VAL	Ge-NPN	6a	S-symm, 30V, 0.4A, B>65	ASY 28 (6a), ASY 29 (6a)	3BG1
ASY 76 (RT)	PHI, RTC, VAL	Ge-PNP	6a	NF/S, 40V, 0.5A, 0.5W	AC 128 (2a), AC 153 (2a), AC 193 (2a), ASY 48 (2a), ASY 80 (6a)	3AX55A
ASY 77 (RT)	PHI, RTC, VAL	Ge-PNP	6a	NF/S, 60V, 0.5A, 0.5W	ACY 24 (3), ASY 48 (2a)	