

全世界舊型積體電路資料手冊

DATA
DATA
DATA



全華科技圖書公司印行

DISCONTINUED LINEAR INTEGRATED CIRCUITS

INTERPRETER SYMBOL & CODES TYPE No. CROSS INDEX & TECHNICAL SECTIONS

- } Indicators of separate manufacturers producing same type number (non-JEDEC), whose characteristics are not the same.
 △ } This manufacturer-identifying symbol (assigned by D.A.T.A.) is an integral part of the type number (in Type No. Cross Index, Technical Data Sections) to avoid the possibility of confusing the devices of one manufacturer with the devices of others.
 % }

#1, #2.: Device has two or more modes of operation — listed on separate lines in the same technical section.

— RT: Suffix indicates device is a replacement type; consult manufacturer.

SYMBOLS & CODES COMMON TO ALL TECHNICAL SECTIONS

LINE No.	OPERATING TEMP. RANGE CODE	TYPE No.
▼ — New Type ♦ — Revised Specification # — Non-JEDEC type Manufactured outside U.S.A.	0 — 0 up to 100°C 1 — 10 up to 200°C 2 — 20 up to 300°C 3 — 30 up to 400°C 4 — 40 up to 500°C 5 — 50 up to 600°C 6 — 60 up to 700°C 7 — 70 up to 800°C 8 — 80 up to 900°C 9 — 90 up to 1000°C A — 100 up to 1100°C B — 110 up to 1200°C C — 120 up to 1300°C D — 130 up to 1400°C E — 140 up to 1500°C F — 150 up to 1600°C G — 160 up to 1700°C H — 170 up to 1800°C J — 180 up to 1900°C K — 190 up to 2000°C M — 2000°C AND ABOVE	▼ — Custom circuit § — Device has two or more modes of operation — listed in separate technical sections * — Device contains two or more identical or matched circuits ∅ — Dual comparators (Sect. 9 only) † — Programmable op-amp characteristics given for highest specified bias current (Sect. 3 only) \$ — Chopper stabilized (Sect. 3 & 4 only) ♦ — Audio driver: one or more characteristics apply for overall system (Sect. 5 only)
OUTLINE DRAWINGS CB — Printed circuit board CH — Chip package CN — Can type — non-JEDEC Outline FP — Flat pack — non-JEDEC Outline M — Mounted on a heat sink MP — Molded or encapsulated package not included in other categories TO — Outline in accordance with JEDEC registration OCT — Octal plug-in (no dwg. shown) △ — MD outline in accordance with JEDEC registration □ — Package only shown	EXAMPLES OF OPERATING TEMP. RANGE CODE: 5 C MIN. VALUE LIES BETWEEN -50° AND -60° OR \$ 8 BOTH VALUES OF TEMP. ARE POS. MAX. VALUE ONLY AS INDICATED. MAX. VALUE LIES BETWEEN +120°C AND +130°C MAX. VALUE LIES BETWEEN +80°C AND +90°C	

3. OPERATIONAL AMPLIFIERS 4. DIFFERENTIAL AMPLIFIERS

4. DIFFERENTIAL AMPLIFIERS																IN ORDER OF (1) TOTAL VOLT (2) MAX IDLE POWER (3) MAX VOLT DRY (4) MAX OFFSET VOLT (5) TYPE				
LINE No.	TYPE No.	PWR SUP @ 25°C RATED SPECS		INPUT CHARACTERISTICS				MIN. @ 25°C		MIN OUTPUT	CHAR. @ 25°C				MIN. SLEW RATE		CHAR. @ 25°C		T.C. DRAWINGS	
		1. TOT. (A)	2. MAX. IDLE P (W)	3. DRY (V)	4. OFFSET (V)	5. MAX. VOLTAGE (V)	6. MAX. CURRENT (A)	CM RANGE (V)	DIFF. IMP. (Ω)	CHAR. VOLT. (V)	CUR. (A)	3dB BW (Hz)	O.I. VOLT. GAIN (dB)	SLEW RATE (V/μs)	CMRR (dB)	E.O. M.D. CT. P.E.	OUT. LINE Δ=MO			
		3	4	5	6	7	8	9	10	11	12	13	14	15	16					
3	♦	One or more of the characteristics are not at rated supply voltage																		
	§	Value is not symmetrical about zero																		
4	†	Typical																		
	*	Minimum																		
	□	Absolute Max. symmetrical about zero																		
5	†	Typical																		
	§	250°C																		
	□	Over limited temperature range																		
6	†	Typical																		
	§	250°C																		
	△	Adjustable to zero																		
	□	Over limited temperature range																		
9	†	Typical																		
	△	Max. safe operating range																		
	§	Value is not symmetrical about zero																		
	SE	single-ended input																		
10	∅	Single-ended input impedance																		
	†	Typical																		
	§	Common mode																		
11	†	Typical																		
12	†	Typical																		
	∅	Load impedance in ohms corresponding to output voltage swing																		
	♦	No load																		
13	†	Typical																		
	∅	Unity gain BW																		
	§	Gain BW product																		
	△	BW less than 3dB																		
	□	Power bandwidth																		
14	†	Typical																		
15	†	Typical																		
	∅	Full power BW (kHz)																		
	□	Full power BW (MHz)																		
16	†	Typical																		

SEE SYMBOLS AND CODES COMMON TO ALL TECHNICAL SECTIONS

TYPE NO. SYMBOLS AND CODES AT TOP OF INTERPRETER CARD

PART B
INTERPRETER
SYMBOL & CODES

SYMBOLS & CODES COMMON TO ALL TECHNICAL SECTIONS

LINE No.	OPERATING TEMP. RANGE CODE	TYPE No.								
▼ - New Type ◆ - Revised Specification # - Non-JEDEC type - Manufactured outside U.S.A.	0 - 0 up to 10°C 1 - 10 up to 20°C 2 - 20 up to 30°C 3 - 30 up to 40°C 4 - 40 up to 50°C 5 - 50 up to 60°C 6 - 60 up to 70°C 7 - 70 up to 80°C 8 - 80 up to 90°C 9 - 90 up to 100°C A - 100 up to 110°C B - 110 up to 120°C C - 120 up to 130°C D - 130 up to 140°C E - 140 up to 150°C F - 150 up to 160°C G - 160 up to 170°C H - 170 up to 180°C J - 180 up to 190°C K - 190 up to 200°C M - 200°C and ABOVE	▼ - Custom circuit \$ - Device has two or more modes of operation - listed in separate technical sections * - Device contains two or more identical or matched circuits ◇ - Dual comparators (Sect. 9 only) † - Programmable op-amp characteristics given for highest specified bias current (Sect. 3 only) \$ - Chopper stabilized (Sect. 3 & 4 only) ◆ - Audio driver: one or more characteristics apply for overall system (Sect. 5 only)								
OUTLINE DRAWINGS	\$ BOTH VALUES OF TEMP. ARE POS. MAX. VALUE ONLY IS INDICATED. EXAMPLES OF OPERATING TEMP. RANGE CODE: <table><tr><td colspan="2">5 C</td></tr><tr><td>MIN. VALUE LIES BETWEEN -50° AND -60°</td><td>MAX. VALUE LIES BETWEEN +120°C AND +130°C</td></tr></table> OR <table><tr><td colspan="2">\$ 8</td></tr><tr><td>BOTH VALUES OF TEMP. ARE POS. MAX. VALUE ONLY AS INDICATED.</td><td>MAX. VALUE LIES BETWEEN +80°C AND +90°C</td></tr></table>	5 C		MIN. VALUE LIES BETWEEN -50° AND -60°	MAX. VALUE LIES BETWEEN +120°C AND +130°C	\$ 8		BOTH VALUES OF TEMP. ARE POS. MAX. VALUE ONLY AS INDICATED.	MAX. VALUE LIES BETWEEN +80°C AND +90°C	
5 C										
MIN. VALUE LIES BETWEEN -50° AND -60°	MAX. VALUE LIES BETWEEN +120°C AND +130°C									
\$ 8										
BOTH VALUES OF TEMP. ARE POS. MAX. VALUE ONLY AS INDICATED.	MAX. VALUE LIES BETWEEN +80°C AND +90°C									
CB - Printed circuit board CH - Chip package CN - Can type - non-JEDEC Outline FP - Flat pack - non-JEDEC Outline M - Mounted on a heat sink MP - Molded or encapsulated package not included in other categories TO - Outline in accordance with JEDEC registration OCT - Octal plug-in (no dwg. shown) △ - MO outline in accordance with JEDEC registration ☐ - Package only shown										

5. AUDIO AMPLIFIERS

LINE No.	TYPE No.	TRANSFER CHARACTERISTICS @25°C										OUTPUT CHAR. @25°C					DRAWINGS
		RATED SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MAX. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MAX. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MAX. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MAX. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	MIN. SUPPLY VOLT. (ΔV)	
3	◆	One or more of the characteristics are not at rated supply voltage															
4	†	Typical															
5	\$	Useful frequency range															
6	†	Typical															
7	†	Typical															
8	†	Typical															
9	†	Typical															
10	†	Typical															
11	†	Typical															
12	*	Minimum range for linear output															
13	†	Typical															
14	\$	Voltage level limited output															
15	†	Typical															

PART B
INTERPRETER
SYMBOL & CODES

6. RF/IF AMPLIFIERS

LINE No.	TYPE No.	PWR SUP @ 25°C				TRANSFER CHARACTERISTICS @ 25°C				INPUT CHAR @ 25°C				OUTPUT CHAR @ 25°C				DRAWINGS	
		1. TOT. P	2. MAX. P	3. PWR GAIN	4. UN. LOAD SPEC	5. MIN. GAIN	6. MAX. GAIN	7. Y21	8. Y12	9. MAX NF	10. MIN VOLT. P-P	11. MAX COND.	12. MAX CAP.	13. MIN. VOLT. P-P	14. MIN. COND.	15. MAX. CAP.	16. MIN. VOLT. P-P	17. MAX. COND.	18. MIN. CAP.
		(W)	(W)	(dB)	(Hz)	(Hz)	(dB)	(mhos)	(mhos)	(dB)	(V)	(mhos)	(F)	(V)	(mhos)	(F)	(V)	(mhos)	(F)

- 3** † - One or more specs. are not at rated supply voltage
§ - Value is not symmetrical about zero
- 4** † - Typical
* - Minimum
☑ - Absolute max. power dissipation
- 5** Δ - Max. available power gain
* - Voltage gain
% - Current gain
§ - AGC available
† - Typical
♦ - Load other than 50 ohm
∅ - AGC threshold vs. freq. ($-\mu Vrms$)
- 7** † - Typical
♦ - Usable frequency range
- 8** † - Typical
* - Voltage gain (dB)
- 9** † - Typical
% - Reverse transfer capacitance (pF)
∅ - Reverse current transfer ratio (G12)
- 10** † - Typical
- 11** † - Typical
Δ - Absolute safe max.
☑ - Typical input power at saturation
- 12** † - Typical
Δ - Differential input
- 13** † - Typical
- 14** † - Typical
- 15** † - Typical
Δ - Differential output
- 16** † - Typical
♦ - Typical susceptibility (mhos)

7. WIDEBAND AMPLIFIERS

LINE No.	TYPE No.	PWR SUP @ 25°C				TRANSFER CHARACTERISTICS @ 25°C				INPUT CHAR @ 25°C				OUTPUT CHAR @ 25°C				DRAWINGS	
		1. TOT. P	2. MAX. P	3. PWR GAIN	4. UN. LOAD SPEC	5. MIN. GAIN	6. MAX. GAIN	7. Y21	8. Y12	9. MAX NF	10. MIN VOLT. P-P	11. MAX COND.	12. MAX CAP.	13. MIN. VOLT. P-P	14. MIN. COND.	15. MAX. CAP.	16. MIN. VOLT. P-P	17. MAX. COND.	18. MIN. CAP.
		(W)	(W)	(dB)	(Hz)	(Hz)	(dB)	(mhos)	(mhos)	(dB)	(V)	(mhos)	(F)	(V)	(mhos)	(F)	(V)	(mhos)	(F)

- 3** † - One or more of the characteristics are not at rated supply voltage
§ - Value is not symmetrical about zero
- 4** † - Typical
* - Minimum
☑ - Absolute max. power dissipation
- 5** † - Typical
∅ - Full power bandwidth
§ - Frequency for min. gain
Δ - Bandwidth Less than 3dB
- 6** † - Typical
Δ - Bandwidth less than 3dB
- 7** † - Typical
Δ - Power gain
% - Current gain
§ - Differential voltage gain
* - Other values of gain available by external connection
§ - AGC available
- 8** † - Typical
§ - Max. signal to noise ratio
* - Max. equivalent input noise ($\mu Vrms$)
Δ - Max. equivalent output noise (mVrms)
- 9** † - Typical
Δ - Intermodulation distortion in dB
- 10** † - Typical
Δ - Differential input
- 11** † - Typical
* - Min. range for linear output
- 12** † - Typical
Δ - Differential output available
- 13** † - Typical
Δ - Output power (W)
- 14** ♦ - No load
- 15** † - Typical
- 16** † - Typical
- SEE SYMBOLS AND CODES COMMON TO ALL TECHNICAL SECTIONS
- ♦ TYPE NO. SYMBOLS AND CODES AT TOP OF FIRST INTERPRETER CARD

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SYMBOL & CODES

SYMBOLS & CODES COMMON TO ALL TECHNICAL SECTIONS

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OUTLINE DRAWINGS		
CB - Printed circuit board CH - Chip package CN - Can type - non-JEDEC Outline FP - Flat pack - non-JEDEC Outline M - Mounted on a heat sink MP - Molded or encapsulated package not included in other categories TO - Outline in accordance with JEDEC registration OCT - Octal plug-in (no dwg. shown) △ - MO outline in accordance with JEDEC registration ☐ - Package only shown		

8. VOLTAGE REGULATORS

LINE No.	TYPE No.	ADJUSTABLE OUTPUT	MIN. VOLT. OUT	VOLT. RANGE	LOW HIGH	MAX. MIN. INPUT LINE VOLT. DIFF.	MAX. MAX. POWER DISSIP. @ 25°C	MAX. CUR. @ 25°C	MAX. IMP. PUT	MAX. DRIFT @ 25°C	MAX. VOLT. CHG.	MAX. LINE REG. CHG.	MAX. LOAD REG. CHG.	MAX. TRANSIENT REJ.	MIN. RIPPL. CHG.	RECOVERY TIME	TYPE No.	DRAWINGS
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

- 3** § - Positive and negative output of this magnitude
◆ - Negative output voltage
- 4 5** * - Other fixed nonadjustable output voltage
% - Accuracy in % tolerance of value indicated in nom. volt. out column
- 7** * - Min. input voltage (V)
- 8** § - Over entire operating range
* - Internally limited
- 10** † - Typical
- 11** † - Typical
% - Percent change over entire range
§ - Over entire operating range
△ - %/°C
- 15** † - Typical
△ - Voltage change in volts
* - Change in %/A
- 16 15 18** † - Typical
- 16** § - Voltage change (volts)
† - Typical
△ - Change in %/volt
◆ - % change for max. line regulation
% - % E_O/E_I

• SEE SYMBOLS AND CODES COMMON TO ALL TECHNICAL SECTIONS

◆ TYPE NO. SYMBOLS AND CODES AT TOP OF FIRST INTERPRETER CARD

PART B
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MIN. VALUE LIES BETWEEN -50° AND -60°	MAX. VALUE LIES BETWEEN +120°C AND +130°C					
BOTH VALUES OF TEMP. ARE POS. MAX. VALUE ONLY AS INDICATED.	MAX. VALUE LIES BETWEEN +80°C AND +90°C					
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9. VOLTAGE COMPARATORS

LINE No.	TYPE No.	INPUT CHARACTERISTICS										OUTPUT CHARACTERISTICS					DRAWINGS				
		PWR SUP @ 25°C	RATED SPECS	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	OVER OPERATING TEMP. RANGE	MIN. OUTPUT	MAX. OUTPUT	MIN. OUTPUT	MAX. OUTPUT	MIN. OUTPUT	MAX. OUTPUT	MIN. OUTPUT	MAX. OUTPUT	MIN. OUTPUT	MAX. OUTPUT
		VOLT	W	W	W	W	W	W	W	W	W	V	V	V	V	V	V	V	V	V	V
		(V)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)

3 † - One or more of the characteristics are not at rated supply voltage \$ - Value is not symmetrical about zero	3 † - Typical \$ - 25°C ⊞ - Over limited temperature range	6 † - Typical \$ - 25°C △ - Adjustable to zero ⊞ - Over limited temp. range	7 † - Typical \$ - 25°C ⊞ - Over limited temperature range	9 † - Typical △ - Max. safe operating range \$ - Value is not symmetrical about zero SE - Single-ended input	10 † - Typical	11 † - Typical ⊞ - Negative	12 † - Typical \$ - Positive △ - Max.	14 † - Typical △ - Absolute safe max.	15 SEE NOTE BELOW † - Typical	16 SEE NOTE BELOW † - Typical \$ - Not at 100 mV input with 5 mV overdrive * - Turn on time ⊞ - Rise time
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Note: W/C (Worst Case) conditions specified:
Min. voltage gain
Max. response time

PART B
INTERPRETER
SYMBOL & CODES

SYMBOLS & CODES COMMON TO ALL TECHNICAL SECTIONS

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50 C													
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10. SPECIAL FUNCTIONS

LINE No.	TYPE No.	1. PWR SUP @ 25°C U. RATED SPEC. S 2 TOT 3 MAX. IMPED.	MIN INPUT CHAR. @ 25°C VOLT. RANGE (V)	OUTPUT CHAR. @ 25°C MAX. MIN VOLT. M D CKT. P E. (V) (+)	1 C. DRAWINGS OUT. LINE. Δ = MO	GENERAL DESCRIPTION

- | | | |
|--|---|---|
| <p>3 1. Current Amplifier</p> <p>2. Logarithmic Amplifier</p> <p>3. Multiplier</p> <p>4. Squaring amplifier</p> <p>5. Function Generator</p> <p>6. SIN/COS function generator</p> <p>7. Sine Wave/Square Wave Oscillator</p> <p>8. Divider</p> <p>9. Freq. to DC Converter</p> <p>10. Voltage controlled Crystal Oscillator</p> <p>11. Volt. to Freq. Converter</p> <p>12 thru 49 RESERVED FOR FUTURE USE</p> | <p>4 ◆ - One or more of the characteristics are not at rated supply voltage</p> <p>§ - Value is not symmetrical about zero</p> <p>3 † - Typical</p> <p>§ - Under load conditions</p> <p>↗ - Absolute max. power dissipation</p> | <p>6 † - Typical</p> <p>* - Min. in current range in Δ mA</p> <p>3 † - Typical</p> <p>* - Max. offset voltage (mV)</p> <p>§ - Value is not symmetrical about zero</p> <p>△ - Absolute safe max.</p> <p>- - Indicates all negative range</p> |
| | <p>8 † - Typical</p> <p>* - Min. out current range in Δ mA</p> <p>∅ - Load impedance in ohms</p> | <p>9 † - Typical</p> <p>§ - Value is not symmetrical about zero</p> <p>- - Indicates all negative range</p> |

• SEE SYMBOLS AND CODES COMMON TO ALL TECHNICAL SECTIONS

◆ TYPE NO. SYMBOLS AND CODES AT TOP OF FIRST INTERPRETER CARD

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PART B
INTERPRETER
SYMBOL & CODES

11. MISCELLANEOUS

IN ORDER OF (1) USE (2) TYPE No.

LINE No.	TYPE No.	USE	Y C D E O D C K T.	DRAWINGS	OUT. LINE	GENERAL DESCRIPTION

- 3**
- 50. AC to DC power supply
 - 51. DC to AC power supply
 - 52. DC to DC power supply
 - 54. Transistor array
 - 55. Ideal diode
 - 56. Ring modulator
 - 57. Logarithmic elements
 - 58. Temp. controlled diff. pair
 - 59. Special subsystem.
 - 60. Diode array

- 7**
- 61. General transistor stage
 - 62. Phase control circuit
 - 63. Reference amplifiers and diodes
 - 64. Voltage or current stabilizers & limiters (temp. compensated)
 - 65. Analog adder/summing amp.
 - 66. B/W TV circuit
 - 67. Color TV circuit

- 68. Audio (stereo & 4-channel circuit)
- 69. AM/FM RF-IF circuit
- 70. FM multiplexer
- 71. Modulator/demodulator
- 72. AFC circuit
- 73. AGC circuit
- 74. Mixer
- 75. Phase lock loop
- 76. Active filters

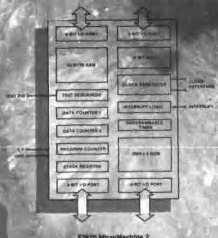
7 13 GENERAL DESCRIPTION COMMON TO SECTIONS 10. & 11.

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ☐ - Selected ranges available △ - Maximum * - Minimum † - Typical ⊗ - Adjustable # - Over entire temperature range § - Value is not symmetrical about zero ♦ - Optional characteristic, consult manufacturer ΔF - Frequency deviation Δi_i - Input current (P-P) Δi_o - Output current (P-P) ΔV_i - Input voltage (P-P) ΔV_o - Output voltage (P-P) ΔV_s - Power supply span 1%BW - Bandwidth for 1% accuracy Acc - Accuracy Adj - Adjustable Anlg - Antilogarithmic function BP - Bandpass BV_{cbo} - Breakdown voltage collector-to-base; emitter open-circuit BV_{ceo} - Breakdown voltage; collector-to-emitter; base open-circuit BV_{cer} - Breakdown voltage; collector-to-emitter; base-to-emitter resistance specified BV_{ebo} - Breakdown voltage; emitter-to-base; collector open-circuit BW 3db - Bandwidth | <ul style="list-style-type: none"> Cd - Capacitance CL - Conversion Loss Darl - Number of darlington pairs Dio - Number of diodes Dr - Drift with time ECL - Emitter coupled logic FP BW - Full power bandwidth Freq - Operating frequency Ft - Extrapolated unity gain frequency (gain bandwidth product). Product of the common-emitter current transfer ratio and the frequency of measurement at a frequency where the current gain is decreasing at the rate of 6 dB per octave. This frequency is also known as the transition frequency. Gi - Current gain Gv - Voltage gain hFE - DC forward current transfer ratio, common emitter HP - Highpass I_c - Collector current, DC I_f - Forward current I_o - Output current I_{os} - Offset current LP - Lowpass I_r - Reverse current I_z - Zener current Lgrf - Logarithmic ratio function Log - Logarithmic function | <ul style="list-style-type: none"> Mod - Module has both log and antilog function No - Output noise Pd - Total power dissipation PLV - Peak Inverse Voltage PLL - Phase lock loop Po - Power output Reg - Line or load regulation - whichever is worst case RL - Rated load Ring - Input voltage range in dB Ro - Output resistance Rpl - Ripple Seg - Number of line segments Sen - Sensitivity SL Rng - Slope range SR - Slew rate TC - Temperature coefficient Tm - Number of transistors Trr - Reverse recovery time Vbe - Base-to-emitter voltage, DC Vcb - Collector-to-base voltage, DC Vce - Collector-to-emitter voltage, DC V_f - Forward voltage V_i - Input voltage V_o - Output voltage V_{os} - Offset voltage V_{ref} - Reference voltage Zx - Zener impedance |
|---|--|--|

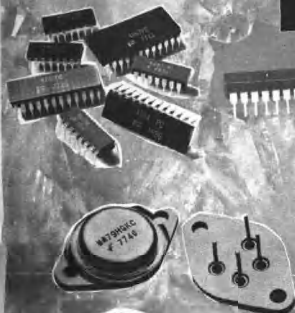
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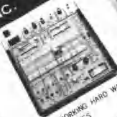
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SSB COMMUNICATION CIRCUITS. RF POWER TRANSMITTING.
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ANA	27-62	143B	ANA	2
ANA	22-63	143CA	ANA	2

B2 **D.A.T.A.** †Copy of mfr's data sheet may be ordered from D.A.T.A. Cur-In current D.A.T.A.BOOK Obs-In this book
 †Registered with JEDEC by this manufacturer **B2**

2. TYPE No. CROSS INDEX

2. TYPE No. CROSS INDEX

IN TYPE NUMBER SEQUENCE

TYPE No.	MFRS	PosLine	TYPE No.	MFRS	PosLine	TYPE No.	MFRS	PosLine	TYPE No.	MFRS	PosLine	TYPE No.	MFRS	PosLine	TYPE No.	MFRS	PosLine	TYPE No.	MFRS
AD026	FCP	28 31	AD3068	FSC	58 108	DL21	TPN	20 38	FST180A	DMC	28 10	HA22A201A	HAS	28 10					
AD027	FCP	28 31	AD3069	FSC	58 109	DL22	TPN	20 39	FST181A	DMC	28 11	HA22A201A	HAS	28 11					
AD040	FCP	18 45	AD3087D	FSC	57 1	DM702F	ODC	31 32	FST180A	DMC	28 10	HA22A201A	HAS	28 10					
AD018	FCP	18 66	AD3087E	FSC	57 2	DM702F	ODC	31 33	FST180A	DMC	28 11	HA22A201A	HAS	28 11					
AD019	FCP	17 87	AD3075D	FSC	57 54	DM709F	ODC	19 10	G208	EEC	33 28	HA23471	HAS	29 8					
AD049A	FCI	22 70	AD3075E	FSC	57 55	DM709F	ODC	20 1	G208	EEC	33 28	HA23471	HAS	29 8					
AD028	FCI	27 71	AD3075F	FSC	57 56	DM709F	ODC	20 2	G208	EEC	33 28	HA23471	HAS	29 8					
AD052A	FCP	12 101	AD3080Q	ANCA	57 63	DM710F	ODC	44 4	GEL222F1	GESY	34 17	HA2620	HAS	17 3					
AD052C	FCP	12 102	CC43	TPN	27 16	DM710F	ODC	44 5	GEL222F1	GESY	34 17	HA2620	HAS	17 3					
AD029	FCP	28 83	AD3081A	TPN	27 17	DM710F	ODC	44 6	GEL222F1	GESY	34 17	HA2620	HAS	17 3					
AL27	MDI	34 64	CH1	TPN	21 17	DP450A	ODC	14 39	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM20	MDI	34 66	CH1	TPN	21 17	DP450A	ODC	14 39	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM201	MDI	31 81	CH1	TPN	21 17	DP450A	ODC	14 39	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM2008	MDI	31 79	CM100	TSC	40 38	DRAM68A10	ESIE	55 55	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM200C	MDI	31 78	CM104	TSC	41 33	DRAM68A25	ESIE	55 56	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM2019	MDI	30 78	CM104	TSC	41 33	DRAM68A10	ESIE	55 55	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM3018	MDI	30 72	CM200	TSC	40 38	DRAM68A10	ESIE	55 55	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM302A	MDI	30 93	CM200	TSC	41 38	DRAM68A25	ESIE	55 56	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM302B	MDI	30 82	CM200	TSC	40 38	DRAM68A10	ESIE	55 55	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM500	MDI	26 68	CM200	TSC	40 38	DRAM68A10	ESIE	55 55	GEL230F1	GESY	34 17	HA2620	HAS	17 3					
AM127	MDI	34 65	CM513	TSC	39 95	DRVL64810P	ESIE	55 82	GEL265S1	GESY	40 69	HA2201	NAS	40 69					
AM128	MDI	34 66	CM513	TSC	39 96	DRVL64810P	ESIE	55 83	GEL265S1	GESY	40 70	HA2201	NAS	40 70					
AN158	MATJ	54 89	CM513.2.1	TSC	39 96	DRVL64810P	ESIE	55 84	GEL2775F1	GESY	34 72	HA2211	NAS	40 40					
AN159	MATJ	54 90	CM513.2.2	TSC	39 97	DRVL64810P	ESIE	55 85	GEL2775F1	GESY	34 73	HA2211	NAS	40 41					
AN204	MATJ	54 83	CM513.2.4	TSC	39 97	DRVL64810P	ESIE	55 86	GEL2775F1	GESY	34 74	HA2211	NAS	40 42					
AN206	MATJ	56 60	CM602	TSC	37 39	DRVM648100P	ESIE	55 87	GEL74102	GESY	15 2	HAD130	EEG	54 80					
AN207	MATJ	56 61	CM602.2	TSC	37 40	DRVM648100P	ESIE	55 88	GEL74102	GESY	15 3	HAD130	EEG	54 81					
AN208	MATJ	56 51	CM602.4	TSC	37 72	DRVM648100P	ESIE	55 89	GEL74102	GESY	15 4	HAD130	EEG	54 82					
AN212	MATJ	34 7	CM723	TSC	40 99	DRVM648100P	ESIE	55 90	GEL1495	GESY	47 85	HC15	DDC	17 60					
AN213	MATJ	34 8	CM723.1	TSC	41 4	DRVM648100P	ESIE	55 91	GEL1495	GESY	47 86	HC15	DDC	17 61					
AN215	MATJ	33 33	CM5050	TSC	none	DRVM648100P	ESIE	55 92	GEL1495	GESY	47 87	HC15	DDC	17 62					
AN219	MATJ	57 53	RepBy B220E	ODC	none	DVR100A	SIE	39 52	GEL1595	GESY	54 82	HEPC0082P	MOTA	57 3					
AN220	MATJ	56 85	CM510	TSC	40 101	DVR2803B3	SIE	39 53	GEL2111A1	GESY	54 83	HEPC0082P	MOTA	57 4					
AN225	MATJ	59 04	RepBy B220E Cur.	ODC	none	DVR2803B3	SIE	39 54	GEL2111A1	GESY	54 84	HEPC0082P	MOTA	57 5					
AN228	MATJ	58 52	CM5100	TSC	40 101	DVR2803B3	SIE	39 55	GEL2111A1	GESY	54 85	HEPC0082P	MOTA	57 6					
AN230	MATJ	58 53	CM510	TSC	40 101	DVR2803B3	SIE	39 56	GEL2111A1	GESY	54 86	HEPC0082P	MOTA	57 7					
AN231	MATJ	58 54	RepBy B248E	ODC	none	DZ19	ODC	23 101	GEL2111F1	GESY	54 87	HEPC0082P	MOTA	57 8					
AN232	MATJ	58 55	CM513.1	TSC	40 101	DZ19	ODC	23 102	GEL2111F1	GESY	54 88	HEPC0082P	MOTA	57 9					
AN233	MATJ	58 56	CM513.2	TSC	40 101	DZ19	ODC	23 103	GEL2111F1	GESY	54 89	HEPC0082P	MOTA	57 10					
AN238	MATJ	58 60	CM5138	TSC	none	EP28A0	TPN	18 3	H9	DDC	25 107	HT73	XDS	30 44					
AN239	MATJ	58 109	RepBy B220E	ODC	none	EP28A0	TPN	18 4	H9	DDC	25 108	HT73	XDS	30 45					
AN244	MATJ	37 36	CM6020	TSC	39 101	EP28A0	TPN	20 23	H16	DDC	17 75	HT21	DDC	17 76					
AN247	MATJ	36 61	RepBy B208E	ODC	none	ESL1	TPN	21 42	H20B0L	DDC	17 77	HT21	DDC	17 77					
AN248	MATJ	57 82	CM510	TSC	40 101	F3188	ICPD	27 78	H20B0L	DDC	17 78	HT21	DDC	17 78					
AN276	MATJ	34 7	RepBy B200C	ODC	none	F3188	ICPD	27 79	H20B0L	DDC	17 79	HT21	DDC	17 79					
AN288	MATJ	58 107	CMF01P	PMI	44 105	F3188	ICPD	27 80	H20B0L	DDC	17 80	HT21	DDC	17 80					
AN289	MATJ	58 108	CMF01P	PMI	44 106	F3188	ICPD	27 81	H20B0L	DDC	17 81	HT21	DDC	17 81					
AN302	MATJ	58 57	CM201	TSC	40 101	F3188	ICPD	27 82	H20B0L	DDC	17 82	HT21	DDC	17 82					
AN332	MATJ	58 57	CM201	TSC	40 101	F3188	ICPD	27 83	H20B0L	DDC	17 83	HT21	DDC	17 83					
AN333	MATJ	58 58	CM201.5	TSC	40 101	F3188	ICPD	27 84	H20B0L	DDC	17 84	HT21	DDC	17 84					
AN334	MATJ	58 59	CM201.5	TSC	40 101	F3188	ICPD	27 85	H20B0L	DDC	17 85	HT21	DDC	17 85					
AN350	MATJ	58 106	CM202.5	TSC	40 101	F3188	ICPD	27 86	H20B0L	DDC	17 86	HT21	DDC	17 86					
AN353	MATJ	58 107	CM202.5	TSC	40 101	F3188	ICPD	27 87	H20B0L	DDC	17 87	HT21	DDC	17 87					
AN354	MATJ	58 108	CM202.5	TSC	40 101	F3188	ICPD	27 88	H20B0L	DDC	17 88	HT21	DDC	17 88					
AN355	MATJ	58 109	CM202.5	TSC	40 101	F3188	ICPD	27 89	H20B0L	DDC	17 89	HT21	DDC	17 89					
AN356	MATJ	58 110	CM202.5	TSC	40 101	F3188	ICPD	27 90	H20B0L	DDC	17 90	HT21	DDC	17 90					
AN357	MATJ	58 111	CM202.5	TSC	40 101	F3188	ICPD	27 91	H20B0L	DDC	17 91	HT21	DDC	17 91					
AN358	MATJ	58 112	CM202.5	TSC	40 101	F3188	ICPD	27 92	H20B0L	DDC	17 92	HT21	DDC	17 92					
AN359	MATJ	58 113	CM202.5	TSC	40 101	F3188	ICPD	27 93	H20B0L	DDC	17 93	HT21	DDC	17 93					
AN360	MATJ	58 114	CM202.5	TSC	40 101	F3188	ICPD	27 94	H20B0L	DDC	17 94	HT21	DDC	17 94					
AN361	MATJ	58 115	CM202.5	TSC	40 101	F3188	ICPD	27 95	H20B0L	DDC	17 95	HT21	DDC	17 95					
AN362	MATJ	58 116	CM202.5	TSC	40 101	F3188	ICPD	27 96	H20B0L	DDC	17 96	HT21	DDC	17 96					
AN363	MATJ	58 117	CM202.5	TSC	40 101	F3188	ICPD	27 97	H20B0L	DDC	17 97	HT21	DDC	17 97					
AN364	MATJ	58 118	CM202.5	TSC	40 101	F3188	ICPD	27 98	H20B0L	DDC	17 98	HT21	DDC	17 98					
AN365	MATJ	58 119	CM202.5	TSC	40 101	F3188	ICPD	27 99	H20B0L	DDC	17 99	HT21	DDC	17 99					
AN366	MATJ	58 120	CM202.5	TSC	40 101	F3188	ICPD	28 0	H20B0L	DDC	18 0	HT21	DDC	18 0					
ATF401	APX	17 102	CO212	VEL	48 55	F2022	GPS	48 20	H0200	SOD	23 40	IC22A00	EFM	53 42					
ATF402	APX	17 103	CO213	VEL	48 56	F2023	GPS	48 21	H0200	SOD	23 41	IC22A00	EFM	53 43					
ATF403	APX	17 104	CO214	VEL	48 57	F2024	GPS	48 22	H0200	SOD	23 42	IC22A00	EFM	53 44					
ATF404	APX	22 40	CO215	VEL	48 58	F2025	GPS	48 23	H0300	FCP	34 23	IC22A00	EFM	53 45					
ATF405	APX	22 41	CO216	VEL	48 59	F2026	GPS	48 24	H0300	FCP	34 24	IC22A00	EFM	53 46					
ATF406	APX	22 42	CO217	VEL	48 60	F2027	GPS	48 25	H0300	FCP	34 25	IC22A00	EFM	53 47					
ATF407	APX	22 43	CO218	VEL	48 61	F2028	GPS	48 26	H0300	FCP	34 26	IC22A00	EFM	53 48					
ATF408	APX	22 44	CO219	VEL	48 62	F2029	GPS	48 27	H0300	FCP	34 27	IC22A00	EFM	53 49					
ATF409	APX	22 45	CO220	VEL	48 63	F2030	GPS	48 28	H0300	FCP	34 28	IC22A00	EFM	53 50					
ATF410	APX	22 46	CO221	VEL	48 64	F2031	GPS	48 29	H0300	FCP	34 29	IC22A00	EFM	53 51					
ATF411	APX	22 47	CO222	VEL	48 65	F2032	GPS	48 30	H0300	FCP	34 30	IC22A00	EFM	53 52					
ATF412	APX	22 48	CO223	VEL	48 66	F2033	GPS	48 31	H0300	FCP	34 31	IC22A00	EFM	53 53					

2. TYPE No. CROSS INDEX

TYPE No. CROSS INDEX				IN TYPE NUMBER SEQUENCE			
TYPE No.	MFRS/PaSLine	TYPE No.	MFRS/PaSLine	TYPE No.	MFRS/PaSLine	TYPE No.	MFRS/PaSLine
MC1353	*MOTA 36:57 MFC8048A	*MOTA 39:14 MT1003-3	*TADI 58:10 N8592G	SIC	37:60 PA238	GEV	
MC1353P3	*MOTA 36:58 MFC8000	*MOTA 33:43 MT1003-3	*TADI 58:10 N80001	*HSC	none	Repl by GEL2391 Obs	
MC135510	*MOTA 57:64 MFC8030	*MOTA 36:12 MT1003-43	*TADI 58:12 Repl by LH0001H Cur	TPN	PA238	*GSEV	
MC1357P0	*MOTA 57:64 MFC8030	*MOTA 36:12 MT1003-43	*TADI 58:12 N80002	*HSC	none	Repl by GEL2391 Obs	
MC1358P0	*MOTA 57:65 MFC8030A	*MOTA 40:93 MT1003-81	*TADI 58:15 N80000	*HSC	none	Repl by GEL24651 Obs	
MC1360P	*MOTA 33:105 MFC8034	*MOTA 39:15 MT1004	*TADI 58:16 Repl by LH0002CN Cur	TPN	PA257	*GSEV	
MC14071	*MOTA 26:9 MFC8033A	*MOTA 39:16 MT104-883	*TADI 42:22 N80003	*HSC	none	Repl by GEL21171 Obs	
MC14290	*MOTA 12:50 MFC8070	*MOTA 33:93 MT105F	*TADI 39:12 LH0003C	*HSC	none	Repl by GEL2113F Obs	
MC14290P	*MOTA 12:50 MFC8000P	*MOTA 57:44 MT105M	*TADI 41:69 N80004	*HSC	none	Repl by GEL21171F Obs	
MC1439P	*MOTA 22:29 MFC8002P	*MOTA 57:48 MT106-883	*TADI 43:83 N80005	*HSC	none	Repl by GEL2631F Obs	
MC1458CNCL	*MOTA 23:28 MFC8010	*MOTA 33:94 MT107	*TADI 28:80 Repl by LH0005H Cur	TPN	PA284	*GSEV	
MC1458P2	*MOTA 23:28 MFC8020A	*MOTA 34:73 MT109	*TADI 38:38 Repl by LH0005AB Cur	TPN	PA284	*GSEV	
MC1467	*MOTA 39:67 MFC8024A	*MOTA 33:55 MT110	*TADI 48:69 N8005C	*HSC	none	Repl by GEL26851 Obs	
MC1467P	*MOTA 39:68 MFC8030	*MOTA 31:10 MT1170	*TADI 58:19 N80020	*HSC	none	Repl by GEL26851 Obs	
MC1507L	*MOTA 25:40 MFC8070	*MOTA 35:60 MT1171	*TADI 36:78 Repl by LH0020G Cur	TPN	PA277	*GSEV	
MC1509P	*MOTA 37:49 MFC8000	*MOTA 34:11 MT200F	*TADI 40:35 Repl by LH0020CG Cur	TPN	PA301	*GSEV	
MC1519G	*MOTA 31:53 MFC8020	*MOTA 34:17 MT200M	*TADI 38:10 N80022	*HSC	none	Repl by GEL30030F Obs	
MC15240	*MOTA 33:55 MFC8000	*MOTA 53:85 MT201A	*TADI 28:81 N80022C	*HSC	none	Repl by GEL30030F Obs	
MC15240P	*MOTA 31:49 MFC8008	*MOTA 14:42 MT204	*TADI 46:30 Repl by LH0022CH Cur	TPN	PA436	*GSEV	
MC1537P	*MOTA 21:47 MHQ2221	*MOTA 53:86 MT206F	*TADI 41:70 N8AM100	*HSC	none	Repl by GEL3010F Obs	
MC15870	*MOTA 39:72 MFC8208	*MOTA 53:88 MT208	*TADI 44:89 N8AM100	*HSC	none	Repl by GEL3010F Obs	
MC1700C	*MOTA 22:73 MFC8207A	*MOTA 53:89 MT207	*TADI 28:52 N8AM2000	*HSC	none	Repl by GEL3010F Obs	
MC17129P	*MOTA 31:30 MHQ3251A	*MOTA 53:91 MT210	*TADI 46:67 N8AM2000	*HSC	none	Repl by GEL3010F Obs	
MC1723F	*MOTA 40:103 MHQ3467	*MOTA 53:92 MT211	*TADI 44:05 N8AM3000	*HSC	none	Repl by GEL3010F Obs	
MC1741C	*MOTA 15:5 MFC1001M	*MAL 33:60 MT271	*TADI 36:77 N8AM3000	*HSC	none	Repl by GEL3010F Obs	
MC1745C	*MOTA 38:38 MFC1003H	*MAL 34:13 MT272	*TADI 57:87 N5759	*HSC	none	Repl by GEL3010F Obs	
MC1708P	*MOTA 38:72 MFC103M	*MAL 33:73 MT302	*TADI 46:31 N857560A	*HSC	none	Repl by GEL3010F Obs	
MC1708P2	*MOTA 39:39 MFC201D	*MAL 33:92 MT306	*TADI 40:43 O4303	*HIS	none	Repl by GEL3010F Obs	
MC1712C	*MOTA 39:101 MFC201M	*MAL 33:92 MT306	*TADI 40:43 O4303	*HIS	none	Repl by GEL3010F Obs	
MC1720C	*MOTA 41:27 MFC840	*MOTA 37:99 MT370	*TADI 16:14 O8PS850	*TPN	none	Repl by GEL3010F Obs	
MC1720C2	*MOTA 41:90 MIVR4251048	*MOTA 38:13 MT371	*TADI 36:78 P110100J	*SCD	51:37	PA7712-39	
MC1806C	*MOTA 38:73 MFLF100	*TPN 30:61 MT373	*TADI 56:12 P15250	*SCD	51:38	PA7712-39	
MC1812C	*MOTA 38:53 MFLM101AU	*MOTA 29:34 MT703	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1816C	*MOTA 39:102 MFLM111L	*MOTA 45:5 MT703E	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1824C	*MOTA 41:75 MFLM	*MOTA 29:35 MT709	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1902C	*MOTA 36:58 MFLM	*MOTA 45:5 MT709C	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1905ZCP	*MOTA 38:81 MFLM311L	*MOTA 45:5 MT709C	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1906C	*MOTA 38:74 MFLM	*MOTA 45:5 MT709C	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1916C	*MOTA 39:41 MFLM	*MOTA 45:5 MT709C	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1924C	*MOTA 39:103 MFLM	*MOTA 45:5 MT709C	*TADI 36:42 P2AU	*TPN	22:103	PA7712-39	
MC1911-14N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
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MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
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MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
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MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
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MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
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MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*MOTA 55:93 MFC1000	*MOTA 40:81 MT741-2	*GPS 47:52 P85AU	*TPN	21:74	PC201	
MC1921-24N	*M						