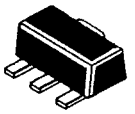
MOTOROLA
SEMICONDUCTOR
TECHNICAL DATA

MXR5160

Die Source Same as 2N5160

RF TRANSISTOR
PNP SILICON



CASE 345-01, STYLE 1
SOT-89

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MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	40	V
Collector-Base Voltage	V_{CBO}	60	V
Emitter-Base Voltage	V_{EBO}	4.0	V
Collector Current — Continuous	I_C	0.4	A
Operating and Storage Junction Temperature Range	T_J, T_{stg}	−55 to +150	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
*Total Device Dissipation, T_A = 25°C Derate above 25°C	P_D	1.0 8.0	Watt mW/°C
Storage Temperature	T_{stg}	150	°C
*Thermal Resistance Junction to Ambient	$R_{\theta JA}$	125	°C/W

*Package mounted on 99.5% alumina 10 x 12 x 0.6 mm.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Sustaining Voltage (I_C = 5.0 mA)	$V_{CEO(sus)}$	40	—	V
Emitter-Base Breakdown Voltage (I_E = 0.1 mA)	$V_{(BR)EBO}$	4.0	—	V
Collector Cutoff Current (V_{CB} = 28 V)	I_{CBO}	—	1.0	μA
Collector Cutoff Current (V_{CE} = 60 V)	I_{CES}	—	0.1	mA
Emitter Cutoff Current (V_{CE} = 28 V)	I_{CEO}	—	20	μA
ON CHARACTERISTICS				
DC Current Gain (I_C = 50 mA, V_{CE} = 5.0 V)	h_{FE}	10	—	—
SMALL-SIGNAL CHARACTERISTICS				
Current-Gain — Bandwidth Product (I_C = 50 mA, V_{CE} = 15 V, f = 200 MHz)	f_T	500	—	MHz