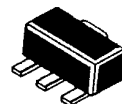


**MOTOROLA  
SEMICONDUCTOR  
TECHNICAL DATA**

**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, $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	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** ( $T_A = 25^\circ\text{C}$  unless otherwise noted.)

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