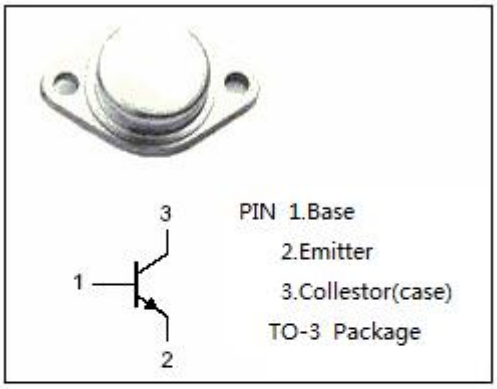
isc Silicon NPN Power Transistor — 2SC1080

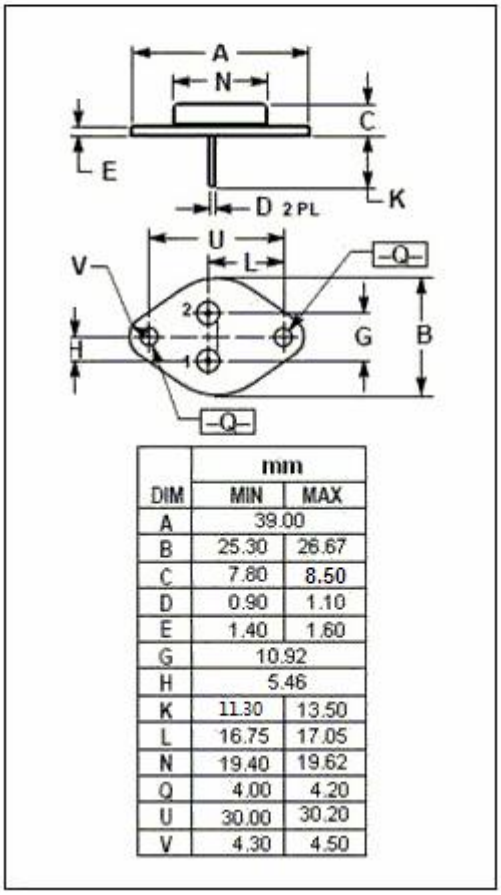


DESCRIPTION

- With TO-3 Package
- High power dissipation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio power amplifier applications



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	110	V
V_{CEO}	Collector-Emitter Voltage	110	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	12	A
P_C	Collector Power Dissipation	100	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 1A			3.0	V
$V_{BE(ON)}$	Base-Emitter ON Voltage	I_C= 10A; V_{CE}= 5V			2.5	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA; I_B= 0	110			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	5			V
h_{FE-1}	DC Current Gain	I_C= 2.0A; V_{CE}= 5V	40		140	
h_{FE-2}	DC Current Gain	I_C= 7.0A; V_{CE}= 5V	15			
f_T	Current-Gain—Bandwidth Product	I_C= 2A ; V_{CE}= 5V		4		MHz

◆ **h_{FE-1} Classifications**

R	Y
40-80	70-140

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