

isc Silicon NPN Power Transistor

2SC1576

DESCRIPTION

- With TO-3 Package
- High voltage
- Wide area of safe operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

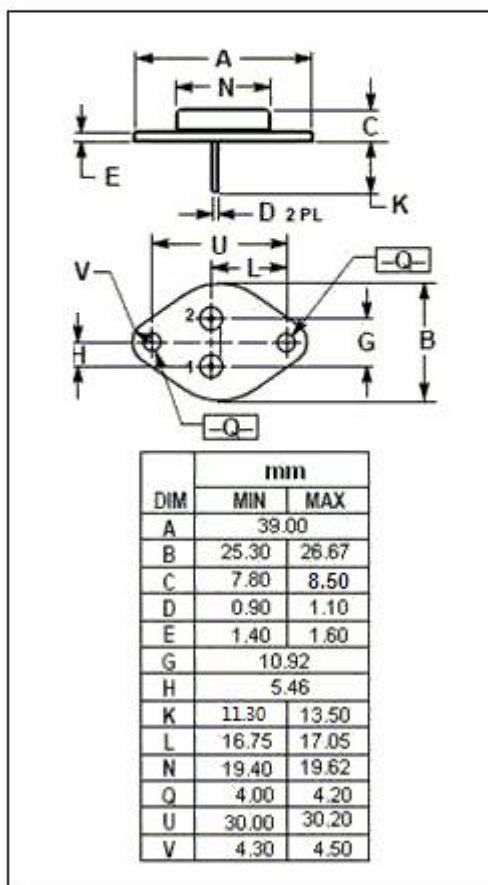
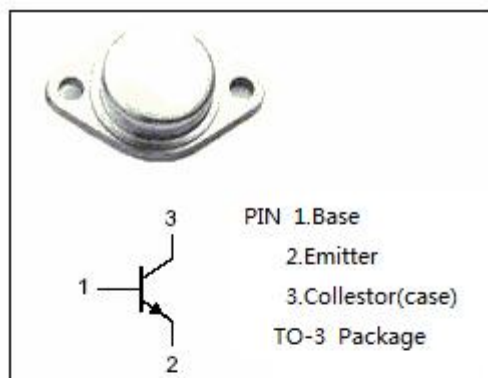
- Power amplifier applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	450	V
V_{CEO}	Collector-Emitter Voltage	330	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	8	A
P_C	Collector Power Dissipation	100	W
T_J	Junction Temperature	200	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.75	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS

 $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5A; I_B=0.8A$			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5A; I_B=0.8A$			1.8	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10mA; I_B=0$	330			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1mA; I_C=0$	7			V
h_{FE}	DC Current Gain	$I_C=1A; V_{CE}=5V$	30		150	
I_{CBO}	Collector Cutoff Current	$V_{CB}=450V; I_E=0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=7V; I_C=0$			100	μA

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