

isc Silicon NPN Power Transistor
2SC1609
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

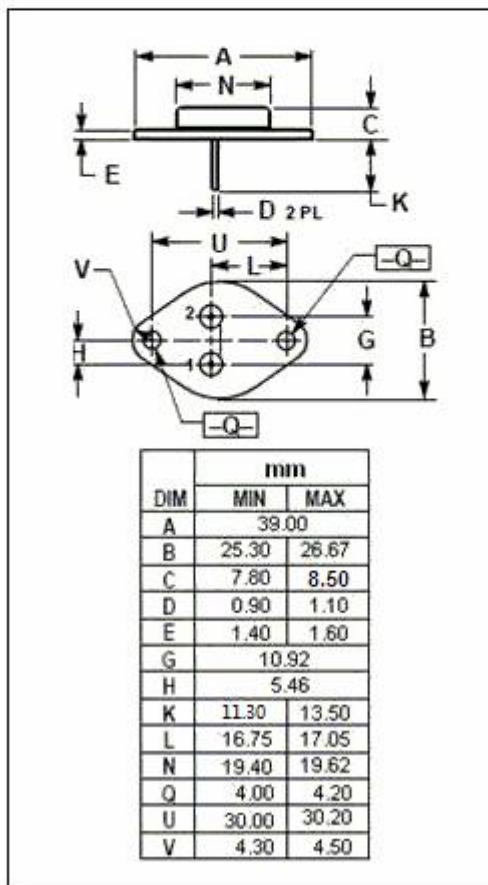
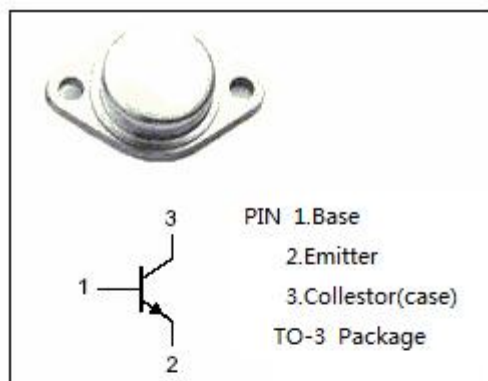
- Power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	140	V
V _{CEO}	Collector-Emitter Voltage	120	V
V _{EBO}	Emitter-Base Voltage	6	V
I _c	Collector Current-Continuous	25	A
P _C	Collector Power Dissipation	120	W
T _J	Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-55~175	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.25	°C/W



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C =10A; I _B = 1.0A			0.6	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C =20A; I _B = 2.0A			2.0	V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 25mA; I _B = 0	120			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	6			V
h _{FE-1}	DC Current Gain	I _C =13A; V _{CE} = 2V	20		100	
h _{FE-2}	DC Current Gain	I _C =20A; V _{CE} = 4V	10			

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