

isc Silicon NPN Power Transistor

2SC3659

DESCRIPTION

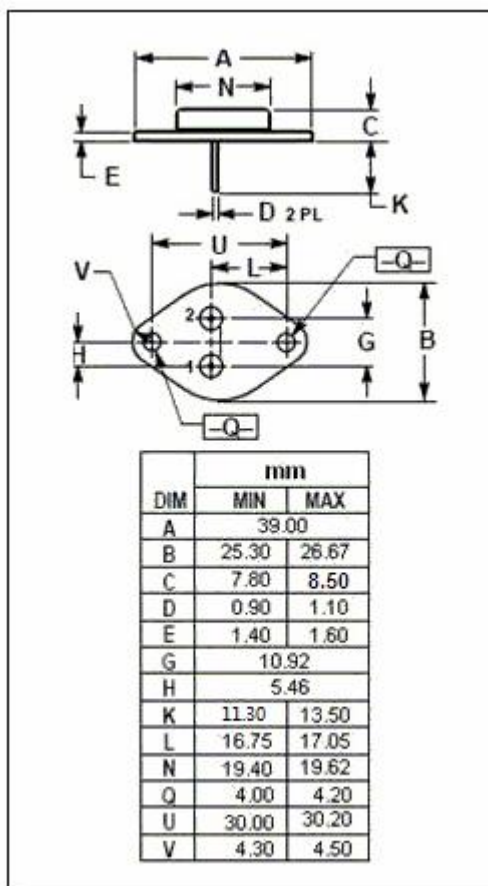
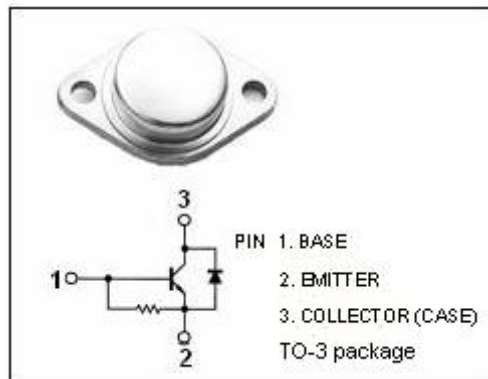
- High Breakdown Voltage-
: $V_{CES} = 1700V$ (Min)
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high voltage, high power switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1700	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	8	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	50	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-45~150	$^\circ C$



isc Silicon NPN Power Transistor**2SC3659****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 1.25A			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 1.25A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CE} = 1400V; I _E = 0			0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			500	mA
V _{ECF}	C-E Diode Forward Voltage	I _F = 6A			2.0	V
t _f	Fall Time	I _C = 5A, I _{B1} = 1A, I _{B2} = -2.5A, L _B = 0			0.5	μs

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