

isc Silicon NPN Power Transistor

2SC3659

DESCRIPTION

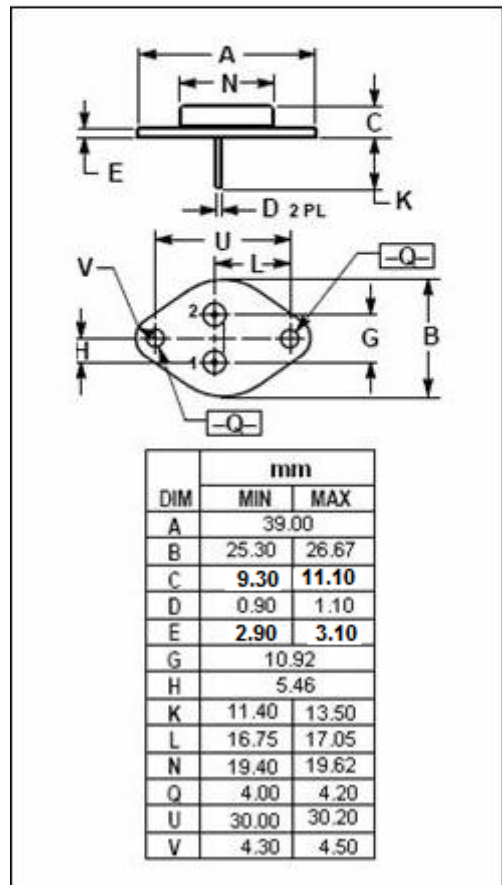
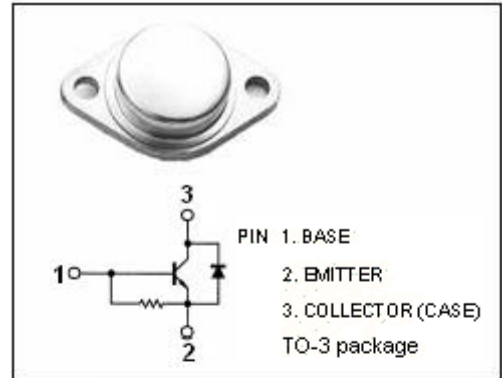
- High Breakdown Voltage-
: $V_{CES} = 1700V$ (Min)
- Built-in Damper Diode

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=1.25\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=1.25\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CE}=1400\text{V}; I_E=0$			0.5	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			500	mA
V_{ECF}	C-E Diode Forward Voltage	$I_F=6\text{A}$			2.0	V
t_f	Fall Time	$I_C=5\text{A}, I_{B1}=1\text{A}, I_{B2}=-2.5\text{A}, L_B=0$			0.5	μs