

isc Silicon NPN Power Transistor

2SC2659

DESCRIPTION

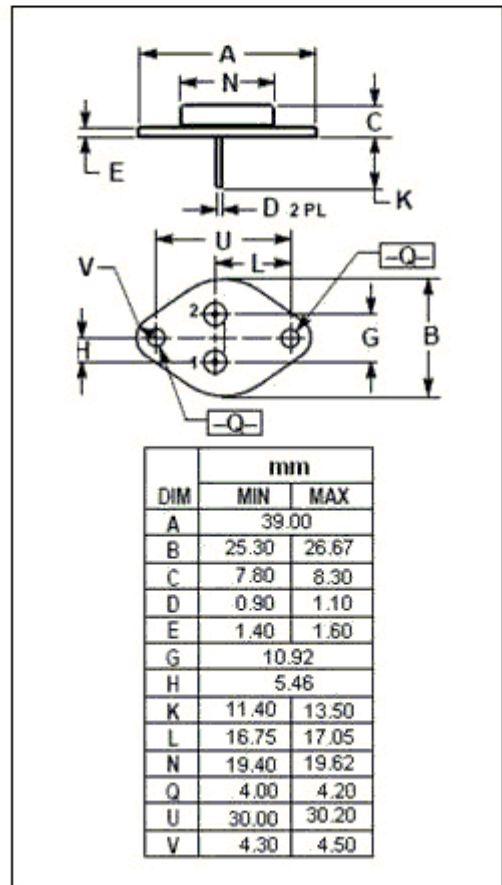
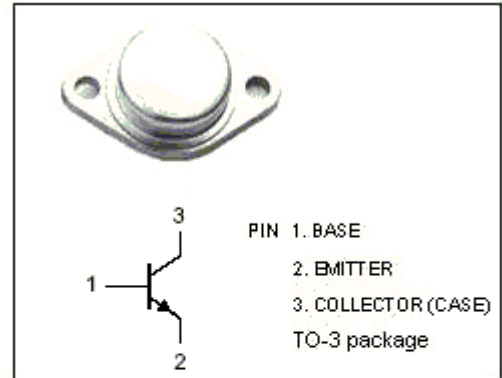
- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 500V$  (Min)
- High Switching Speed

APPLICATIONS

- Designed for high speed power switching applications.

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

SYMBOL	PARAMETER	MAX	UNIT
$V_{CBO}$	Collector-Base Voltage	800	V
$V_{CEO}$	Collector-Emitter Voltage	500	V
$V_{EBO}$	Emitter-Base Voltage	8	V
$I_C$	Collector Current-Continuous	7	A
$I_{CM}$	Collector Current-Peak	15	A
$P_C$	Collector Power Dissipation @ $T_C=25^{\circ}C$	120	W
$T_j$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



**isc Silicon NPN Power Transistor****2SC2659****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 0.2A ; L= 25mH$	500			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5A; I_B= 1A$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5A; I_B= 1A$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 800V; I_E= 0$			0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 5V; I_C= 0$			0.1	mA
$h_{FE-1}$	DC Current Gain	$I_C= 0.1A; V_{CE}= 5V$	15			
$h_{FE-2}$	DC Current Gain	$I_C= 5A; V_{CE}= 5V$	8			

## Switching Times

$t_{on}$	Turn-On Time	$I_C= 5A; I_{B1}= -I_{B2}= 1A$			1	$\mu s$
$t_{stg}$	Storage Time				2.5	$\mu s$
$t_f$	Fall Time				1	$\mu s$