

isc Silicon NPN Power Transistor

2SC2659

DESCRIPTION

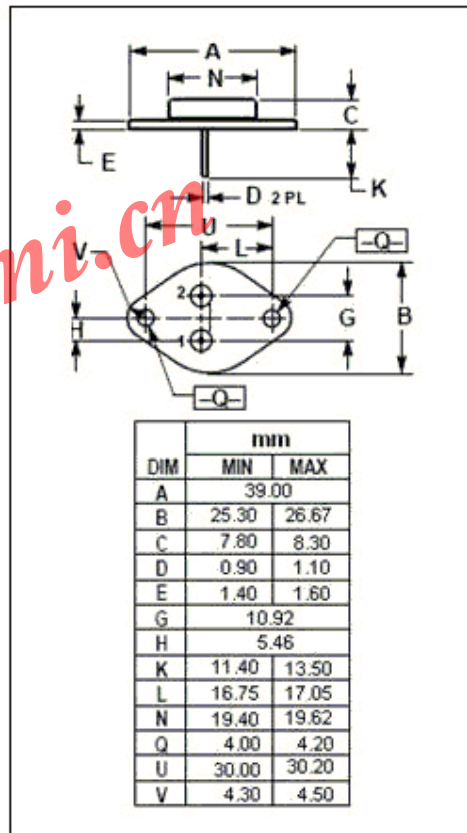
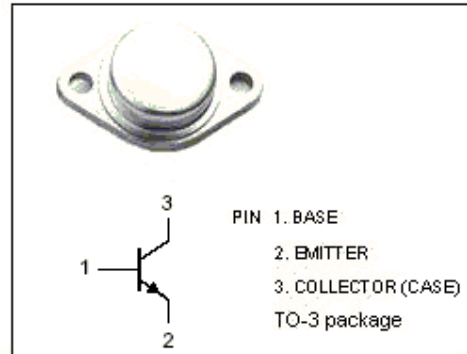
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 500V$ (Min)
- High Switching Speed

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	μs
t_{stg}	Storage Time				2.5	μs
t_f	Fall Time				1	μs