

isc Silicon NPN Power Transistor
2N6575
DESCRIPTION

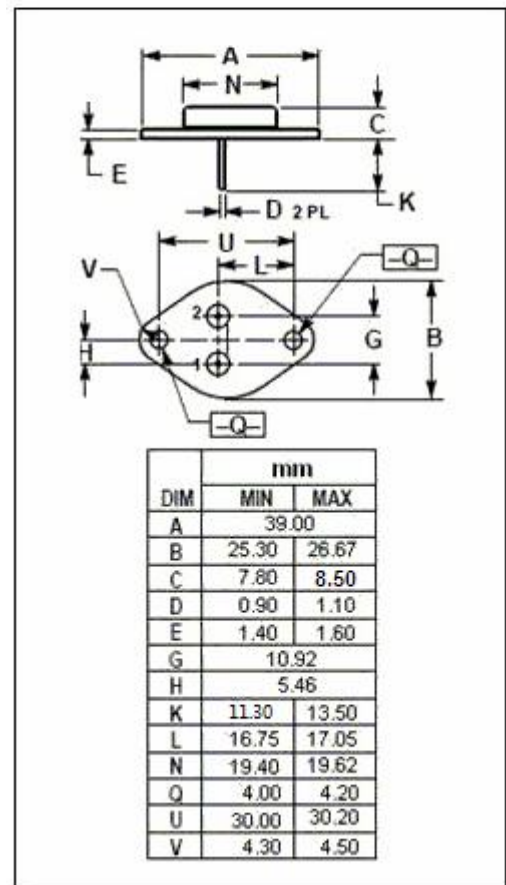
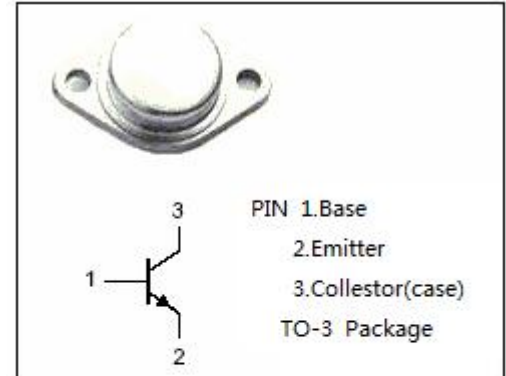
- Collector-Emitter Sustaining Voltage-
: $V_{CEO} = 300V(\text{Min.})$
- Fast Switching Speed
- High Current Capability
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for converters, inverters, pulse-width- modulated regulators and a variety of power switching circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	700	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
P_C	Collector Power Dissipation@ $T_c=25^\circ\text{C}$	125	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3A; I_B=0.3A$		1	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=7A; V_{CE}=3V$		1.4	V
I_{EBO}	Emitter Cutoff Current	$V_{EB}=8V; I_C=0$		0.1	mA
I_{CBO}	Collector Base Cutoff Current	$V_{CB}=700V; I_E=0$		0.1	mA
h_{FE-1}	DC Current Gain	$I_C=3A; V_{CE}=3V$	20	60	
h_{FE-2}	DC Current Gain	$I_C=7A; V_{CE}=3V$	7	21	
f_T	Current Gain-Bandwidth Product	$I_C=1A; V_{CE}=10V$	5		MHz
Switching times					
T_{on}	On Time	$I_C=7A; I_B=1.4A,$		1	μs
t_{off}	Off Time			3.2	μs

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