

isc Silicon NPN Power Transistor

2N6582

DESCRIPTION

- Excellent Safe Operating Area
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 350V(\text{Min})$
- High Current Capability
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.5 V(\text{Max}) @ I_C = 10A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

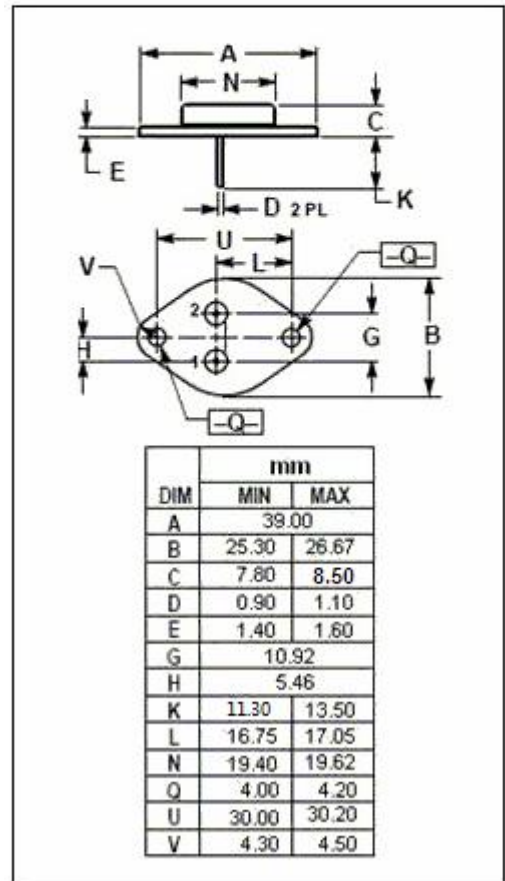
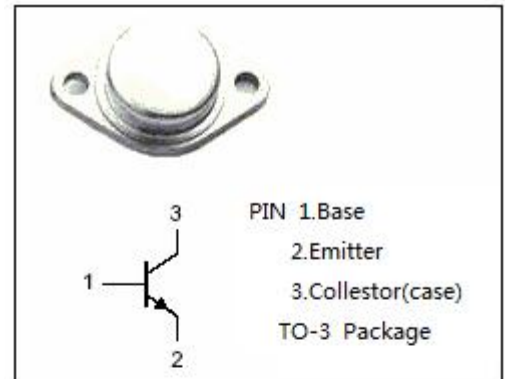
- Designed for linear amplifiers, series pass regulators, and inductive switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	450	V
V_{CEO}	Collector-Emitter Voltage	350	V
V_{EBO}	Emitter-Base Voltage	9	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	200	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.17	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CE(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0	350			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1.0A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A; I _B = 1.0A			2.0	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 350V; I _B = 0			1.0	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = 450V ; I _E = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 9V; I _C =0			0.1	mA
h _{FE-1}	DC Current Gain	I _C = 5A ; V _{CE} = 3V	7		35	
h _{FE-2}	DC Current Gain	I _C = 10A ; V _{CE} = 3V	5			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		25		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} =1MHz		250		pF

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