

isc Silicon PNP Power Transistors
BD369
DESCRIPTION

- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -1.0V(\text{Max}) @ I_C = -10A$
- DC Current Gain-
: $h_{FE} = 20(\text{Min}) @ I_C = -10A$
- Excellent Safe Operating Area
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

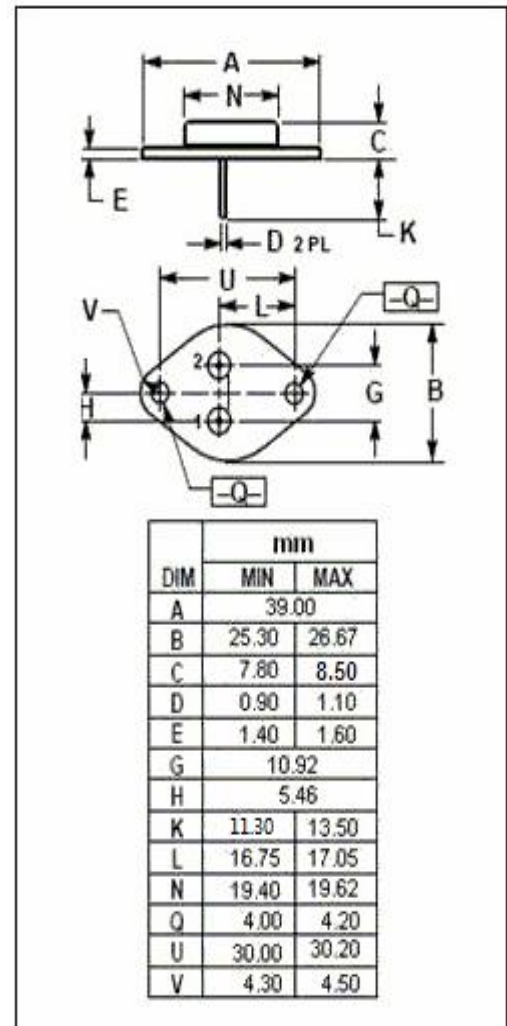
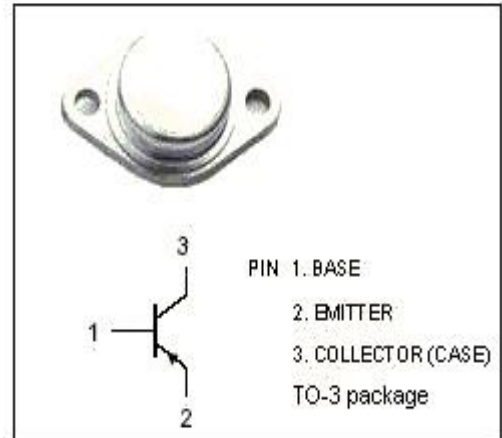
- Designed for general purpose power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS($T_C = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-25	A
I_{CM}	Collector Current-Peak	-50	A
I_B	Base Current-Continuous	-7.5	A
P_D	Total Power Dissipation @ $T_C = 25^\circ C$	200	W
T_j	Junction Temperature	-65~200	$^\circ C$
T_{stg}	Storage Temperature	-65~200	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	0.875	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)} (1)	Collector-Emitter Sustaining Voltage	I _C = -50mA ; I _B = 0	-80		V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1 A		-1.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = -25A; I _B = -6.25A		-4.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C =-25A; I _B =-6.25A		-2.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -10A ; V _{CE} = -4V		-1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -40V; I _B = 0		-2.0	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = -80V; I _E = 0		-1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C =0		-1.0	mA
h _{FE-1}	DC Current Gain	I _C =-5A ; V _{CE} =-4V	25		
h _{FE-2}	DC Current Gain	I _C =-10A ; V _{CE} =-4V	20	100	
h _{FE-3}	DC Current Gain	I _C =-25A ; V _{CE} =-4V	4		
C _{OB}	Output Capacitance	I _E = 0; V _{CB} =-10V; f _{test} = 1MHz		1000	pF
f _T	Current-Gain—Bandwidth Product	I _C =-1A ; V _{CE} =-10V ; f _{test} = 1MHz	4		MHz

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