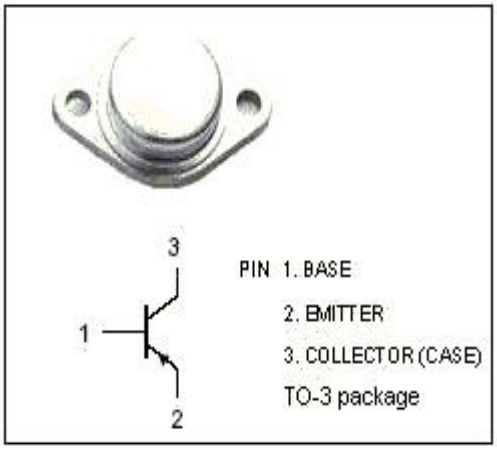
isc Silicon PNP Power Transistors — BD369

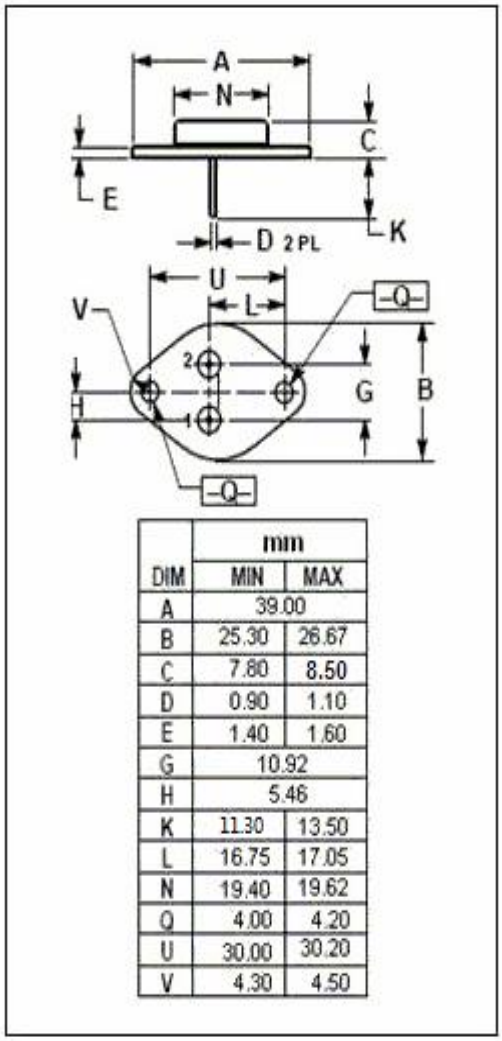
DESCRIPTION

- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$=-1.0V(Max)@ I_C=-10A
- DC Current Gain-
  : h_{FE}= 20(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.



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

ABSOLUTE MAXIMUM RATINGS(T_C=25℃)

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℃	200	W
T_j	Junction Temperature	-65~200	℃
T_{stg}	Storage Temperature	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.875	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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