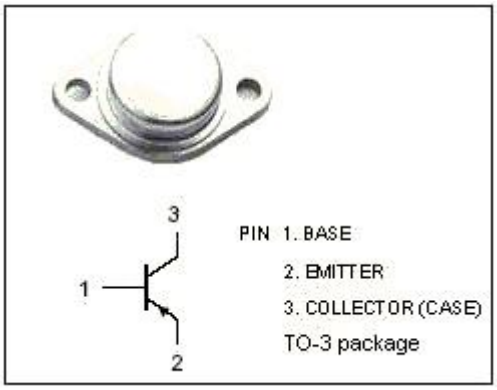
isc Silicon PNP Power Transistor — BD343

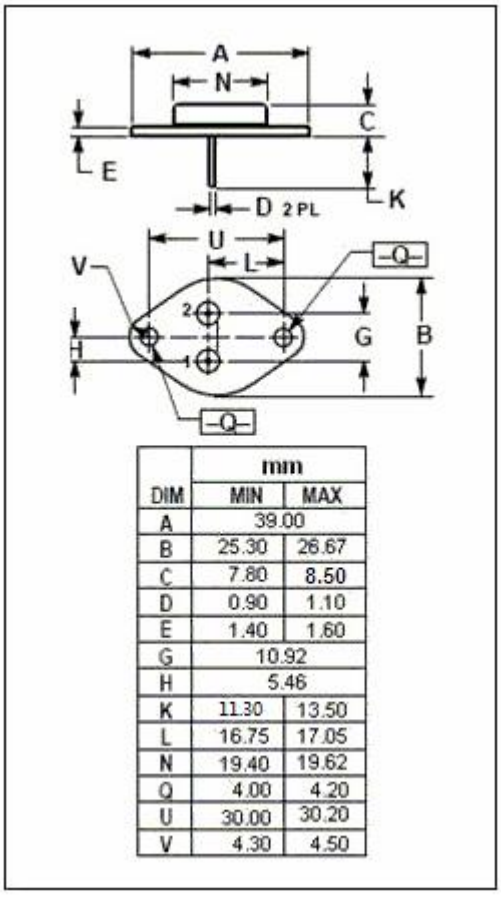
DESCRIPTION

- Excellent Safe Operating Area
- High DC Current Gain-
  : h_{FE}=15-100(Min)@I_C= -8A
- Low Saturation Voltage-
  : $V_{CE(sat)}$= -1.0V(Max)@ I_C = -8.0A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for high 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_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-12	A
I_{CM}	Collector Current-Peak	-15	A
I_B	Base Current-Continuous	-5	A
P_C	Collector Power Dissipation @T_C=25℃	100	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -30mA; I_B= 0	-40		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -8A; I_B= -0.8A		-1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -12A; I_B= -2A		-2.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= -8A; I_B= -0.8A		-2.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= -12A; I_B= -2A		-3.0	V
I_{CEO}	Collector Cutoff Current	V_{CE}= -40V; I_B= 0		-0.5	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= -40V; I_E= 0		-0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5.0V; I_C= 0		-0.1	mA
h_{FE-1}	DC Current Gain	I_C= -1A; V_{CE}= -5V	60	200	
h_{FE-1}	DC Current Gain	I_C= -8A; V_{CE}= -5V	15	100	
h_{FE-2}	DC Current Gain	I_C= -12A; V_{CE}= -5V	5		
f_T	Current Gain-Bandwidth Product	I_C= -1A; V_{CE}= -10V; f= 1MHz	3.0		MHz