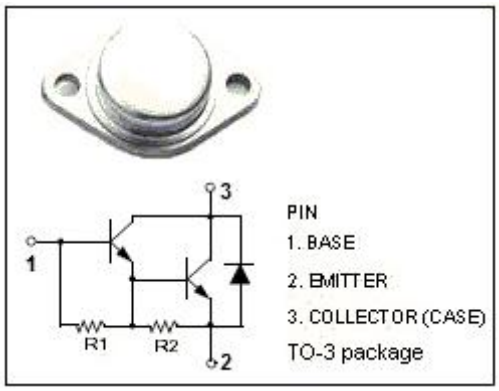
isc Silicon NPN Darlingtion Power Transistor 2SD1540

DESCRIPTION

- High DC current gain-
  h_{FE} = 800 (Min) @ I_C = 0.5A
- Collector-Emitter Breakdown Voltage-
  $V_{(BR)CEO}$= 100V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

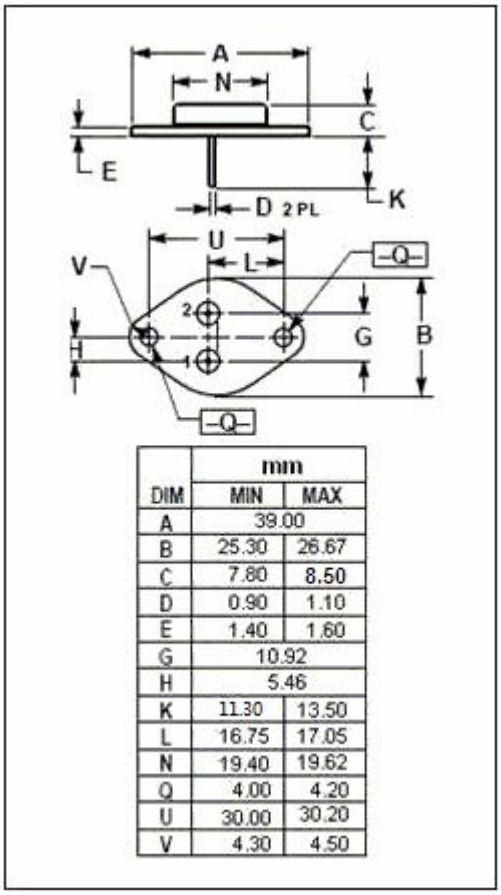


APPLICATIONS

- Designed for general purpose power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS(T_C=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	6	A
I_B	Base Current	0.2	A
P_C	Collector Power Dissipation@T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃



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

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 30mA; I_B= 0	100		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 2mA; I_C= 0	5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 16mA		2.0	V
$V_{BE(on)}$	Base-Emitter On voltage	I_C= 4A ; V_{CE}= 4V		2.5	V
I_{CEO}	Collector Cutoff current	V_{CE}= 100V; I_B= 0		1.0	mA
I_{CBO}	Collector Cutoff current	V_{CB}= 100V; I_E= 0		0.1	mA
I_{EBO}	Emitter Cut-off current	V_{EB}= 5V; I_C= 0		2.0	mA
h_{FE-1}	DC Current Gain	I_C= 0.5A ; V_{CE}= 5V	800		20000
h_{FE-2}	DC Current Gain	I_C= 4A ; V_{CE}= 3V	500		

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