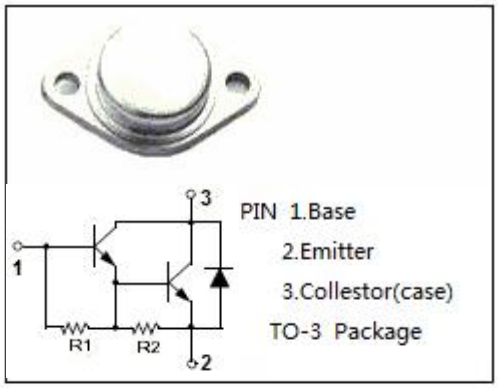
isc Silicon NPN Darlington Power Transistor 2N6357

DESCRIPTION

- High DC current gain
  : h_{FE}= 500(Min)@ I_C= 4A
- With TO-3 package
- Low collector saturation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

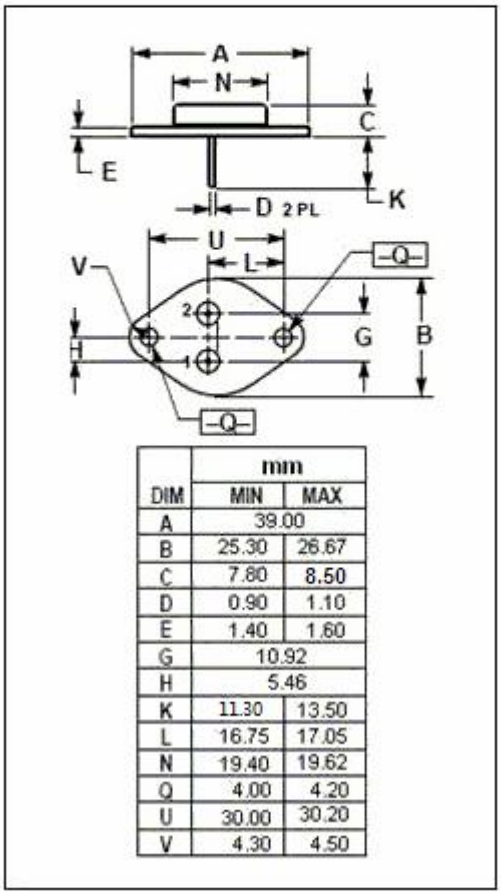
- Designed for general-purpose power amplifier and low -frequency swithing applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	20	A
I_B	Base Current-Continuous	0.5	A
P_C	Collector Power Dissipation@T_C=25℃	150	W
T_J	Junction Temperature	200	℃
T_{stg}	Storage Temperature	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.09	℃/W



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	TYP	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA ; I_B= 0	60			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C=10A; I_B= 40mA			2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C=20A; I_B= 1A			4.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C=20A; I_B= 1A			4.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 10A ; V_{CE}= 4V			2.8	V
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			5	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 60V; I_B=0			1	mA
I_{CBO}	Collector Base Cutoff Current	V_{CB}=80V; I_E= 0			0.5	mA
h_{FE-1}	DC Current Gain	I_C= 4A; V_{CE}= 5V	500		5000	
h_{FE-2}	DC Current Gain	I_C= 20A; V_{CE}= 5V	100			