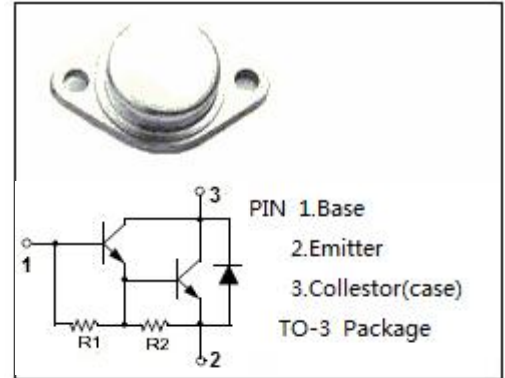


isc Silicon NPN Darlington Power Transistor
2N6357
DESCRIPTION

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


APPLICATIONS

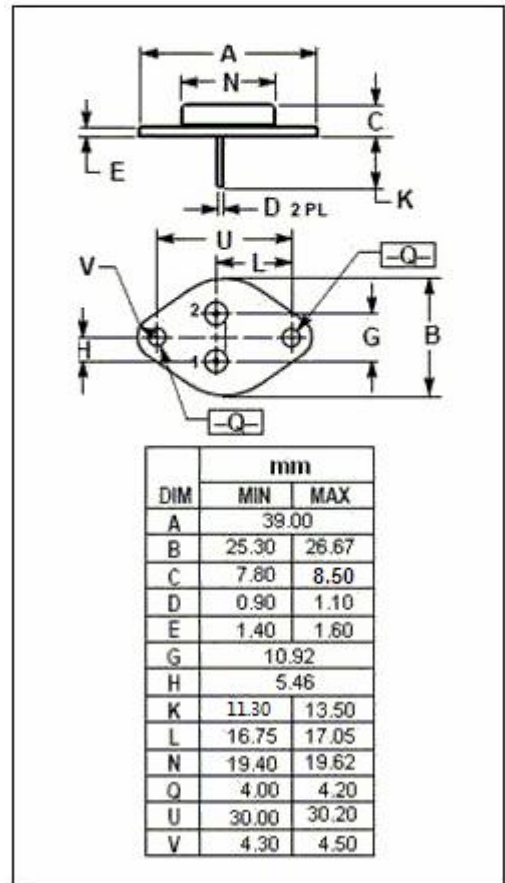
- Designed for general-purpose power amplifier and low-frequency switching applications.

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

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 @ $T_C = 25^\circ\text{C}$	150	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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



isc Silicon NPN Darlington Power Transistor
2N6357
ELECTRICAL CHARACTERISTICS
 $T_C=25^{\circ}\text{C}$ unless otherwise specified

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

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