

isc Silicon NPN Darlington Power Transistor

2SD617

DESCRIPTION

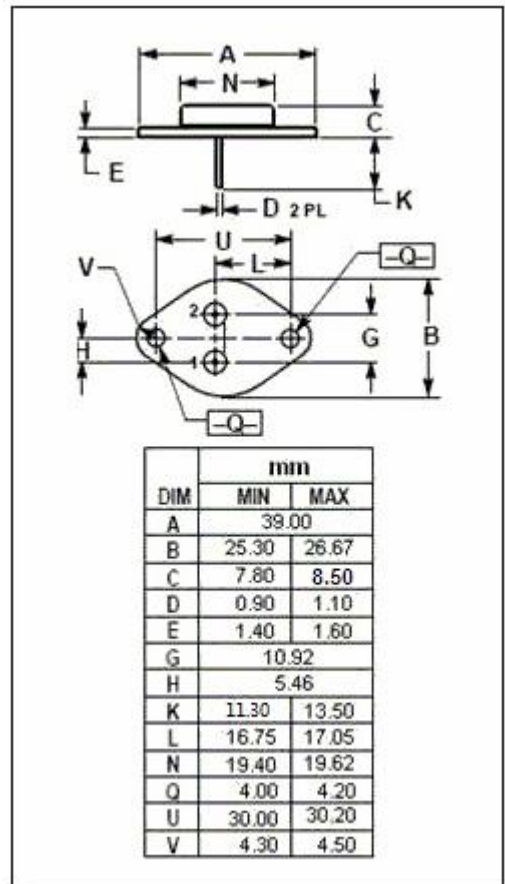
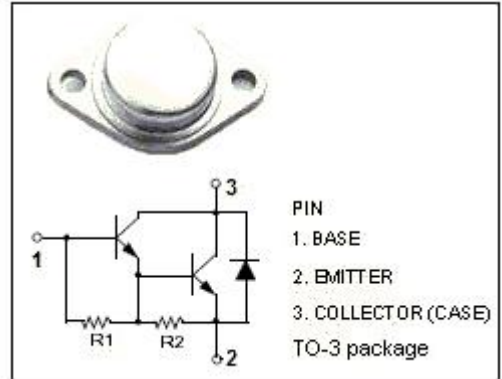
- Low Collector Saturation Voltage
- High DC Current Gain
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio output stages and general amplifier and switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	120	V
V _{CEO}	Collector-Emitter Voltage	100	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current	8	A
I _{CM}	Collector Current-Peak	12	A
P _C	Collector Power Dissipation @T _c =25°C	100	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B =0	100			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B = 40mA			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4A; I _B = 40mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} =120V; I _E =0			0.2	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 100V; I _B = 0			0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 4V	2500			
h _{FE-2}	DC Current Gain	I _C = 3A ; V _{CE} = 4V	1000			
h _{FE-2}	DC Current Gain	I _C = 8A ; V _{CE} = 4V	750			

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