

isc Silicon NPN Darlington Power Transistor

2N6283

DESCRIPTION

- Built-in Base-Emitter Shunt Resistors
- High DC current gain-
 $h_{FE} = 750$ (Min) @ $I_C = 10$ A
- Collector-Emitter Sustaining Voltage-
 $V_{CEO(SUS)} = 80V$ (Min)
- Complement to type 2N6286
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

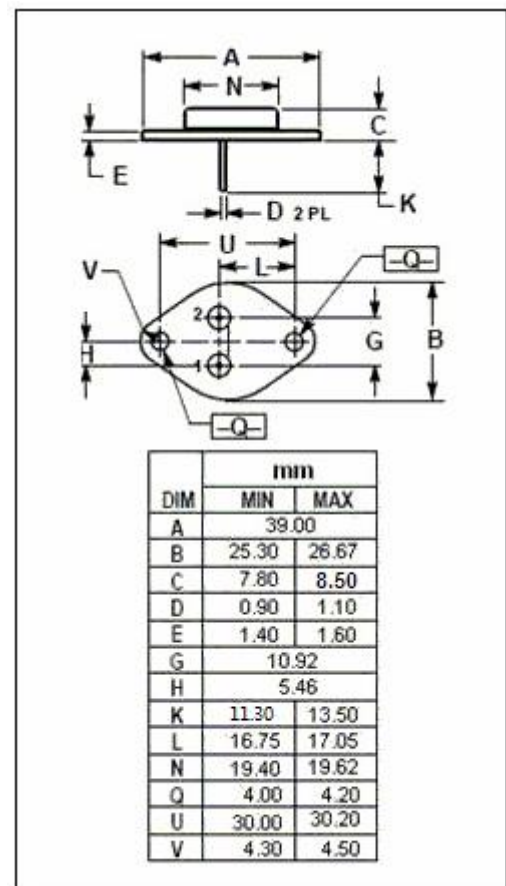
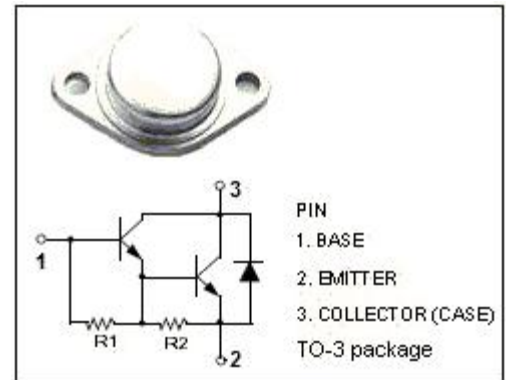
- Intended for general purpose amplifier and low frequency switching applications, such as linear and switching industrial equipment.

ABSOLUTE MAXIMUM RATINGS($T_C = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current -Continuous	20	A
I_{CP}	Collector Current-Peak	40	A
I_B	Base Current	0.5	A
P_C	Collector Power Dissipation@ $T_C = 25^\circ C$	160	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

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



isc Silicon NPN Darlington Power Transistor**2N6283****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	80		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 = 200mA		3.0	V
V _{BE(sat)}	Base-Emitter Saturation voltage	I _C = 20A; I _B = 200mA		4.0	V
V _{BE(on)}	Base-Emitter On voltage	I _C = 10A ; V _{CE} = 3V		2.8	V
I _{CEO}	Collector Cutoff current	V _{CE} = 40V; I _B =0		1.0	mA
I _{EBO}	Emitter Cut-off current	V _{EB} = 5V; I _C = 0		2.0	mA
h _{FE-1}	DC Current Gain	I _C = 10A ; V _{CE} = 3V	750	18000	
h _{FE-2}	DC Current Gain	I _C = 20A ; V _{CE} = 3V	100		
C _{OB}	Output Capacitance	I _E =0 ; V _{CB} = 10V; f _{test} = 1.0MHz		400	pF

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