

isc Silicon NPN Power Transistors

2SD583

DESCRIPTION

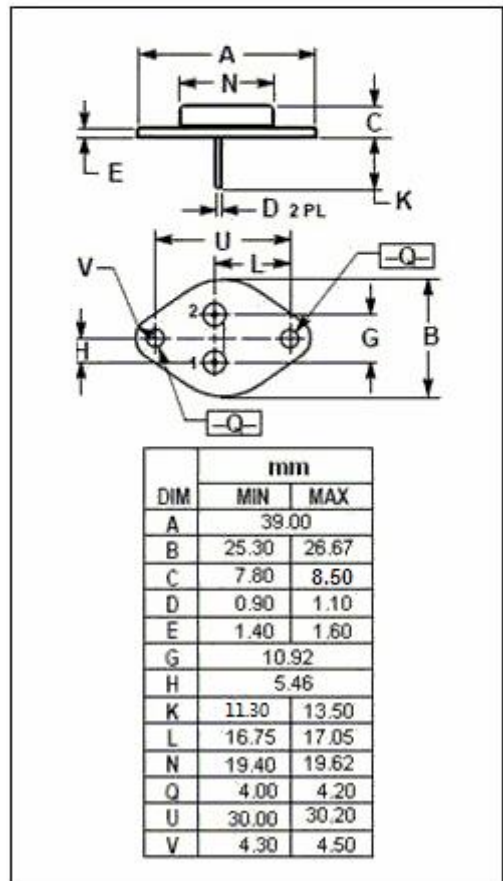
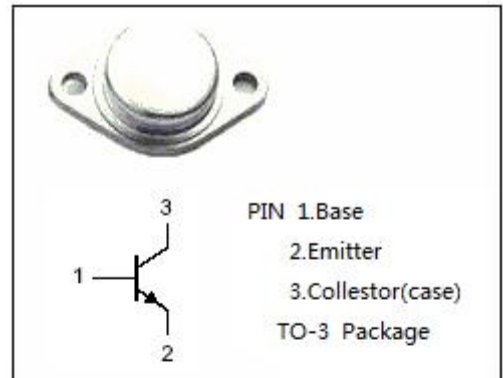
- High Current Capability
- Excellent Safe Operating Area
- High DC current Gain
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high power audio, disk head positioners and other linear applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Current-Peak	25	A
I_B	Base Current-Continuous	5	A
P_D	Total Power Dissipation @ $T_C=25^{\circ}\text{C}$	150	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65~150	$^{\circ}\text{C}$



isc Silicon NPN Power Transistors**2SD583****ELECTRICAL CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	250		V
V _{CE(sat)} -1	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 0.8A		1.4	V
V _{CE(sat)} -2	Collector-Emitter Saturation Voltage	I _C = 15A; I _B = 3A		4.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 8A ; V _{CE} = 4V		2.2	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 250V; I _B = 0		0.5	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = 250V; I _E = 0		0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0		0.1	mA
h _{FE-1}	DC Current Gain	I _C = 2A ; V _{CE} = 5V	60	200	
h _{FE-2}	DC Current Gain	I _C = 8A ; V _{CE} = 5V	30		
f _T	Current-Gain—Bandwidth Product	I _C = 1A ; V _{CE} = 10V; f _{test} = 1.0MHz	4		MHz

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