

isc Silicon NPN Power Transistor
2SC1893
DESCRIPTION

- With TO-3 Package
- Low collector saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

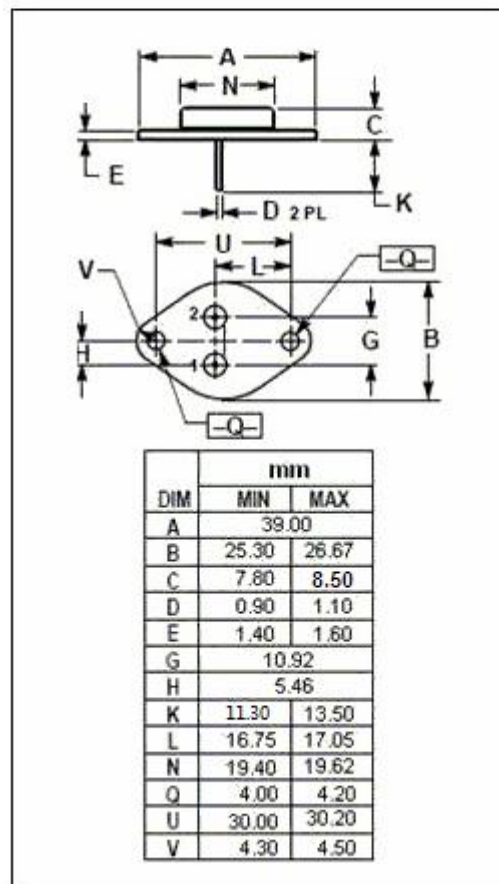
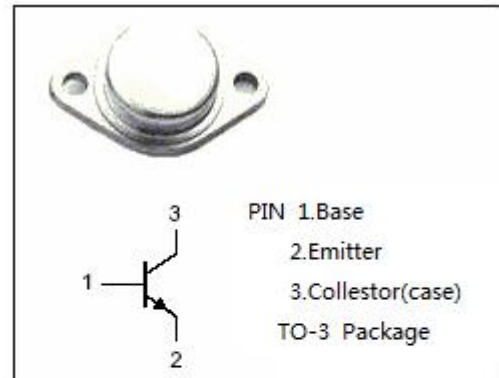
- Designed for switching and wide-band amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	500	V
V_{EBO}	Emitter-Base Voltage	5	V
I_c	Collector Current-Continuous	3.5	A
P_c	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	50	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^{\circ}\text{C/W}$



isc Silicon NPN Power Transistor**2SC1893****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 3A; I_B= 0.6A$		5.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C= 3A; V_{CE}= 0.6V$		1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=1000V; I_B= 0$		100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 5V; I_C=0$		100	μA
h_{FE}	DC Current Gain	$I_C= 1A; V_{CE}= 5V$	10	40	

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