

isc Silicon NPN Power Transistor
2SC4742
DESCRIPTION

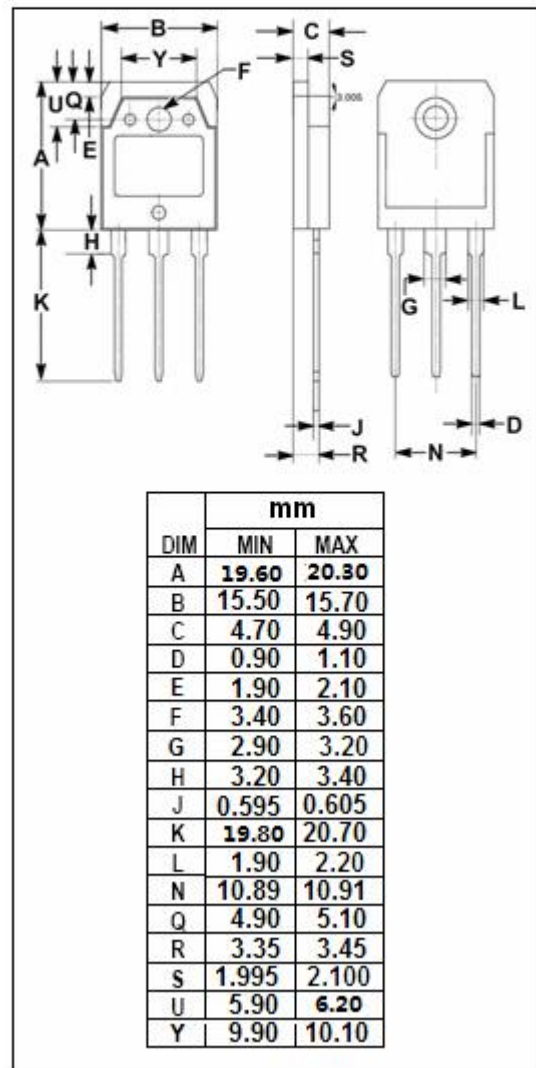
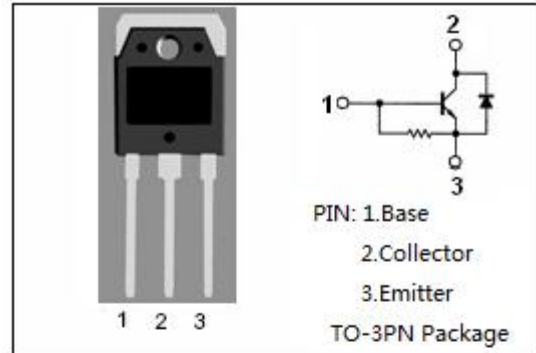
- High Breakdown Voltage-
: $V_{CES} = 1500V$ (Min)
- Built-in Damper Diode
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for character display horizontal deflection output stage applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1500	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	6	A
$I_{C(peak)}$	Collector Current-Peak	7	A
$I_{C(surge)}$	Collector Current-Surge	16	A
I_D	C-E Diode Forward Current	7	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	50	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 400mA ; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 1.25A			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 1.25A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V ; R _{BE} = 0			500	μ A
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V			25	
V _{ECF}	C-E Diode Forward Voltage	I _F = 6A			2.0	V
t _f	Fall Time	I _{CP} = 5A , I _{B1} = 1A; I _{B2} = -2A			0.4	μ s

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