

isc Silicon NPN Power Transistor

2SC3688

DESCRIPTION

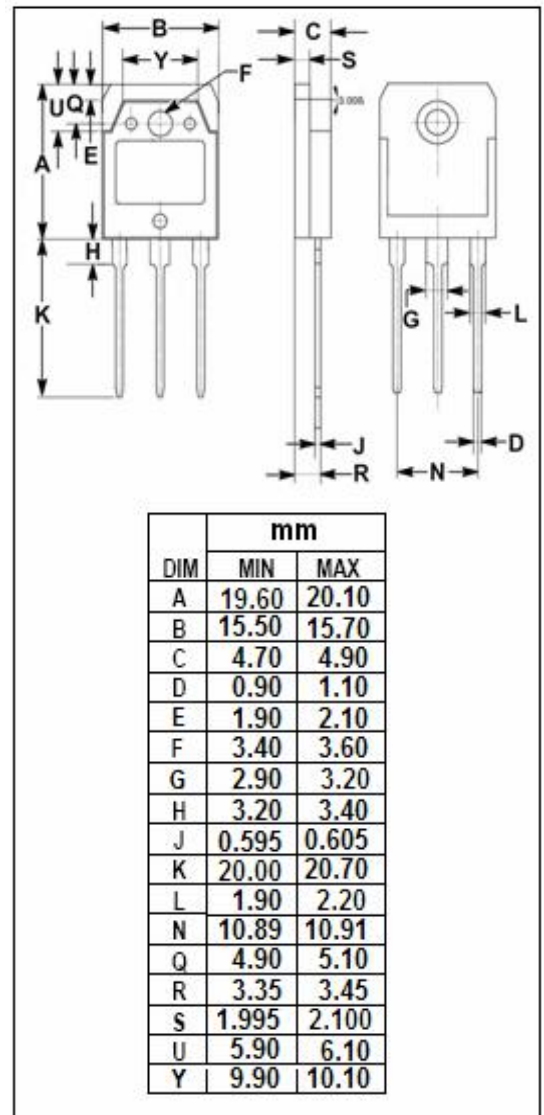
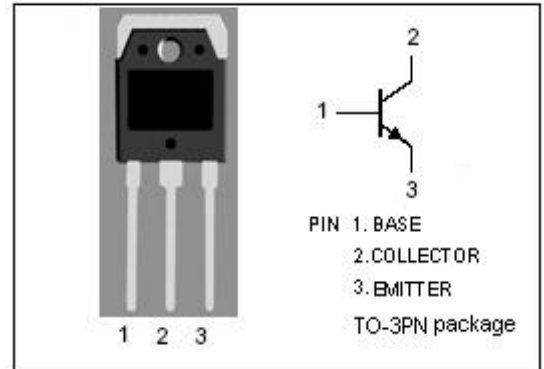
- High Breakdown Voltage-
: $V_{(BR)CBO} = 1500V(\text{Min})$
- High Switching Speed
- High Reliability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for ultrahigh-definition color display horizontal deflection output 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	800	V
V_{EBO}	Emitter-Base voltage	6	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	25	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	150	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3688****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 = 10mA ; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 2A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 8A; I _B = 2A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V ; R _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			1.0	mA
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8			

Switching times

t _{stg}	Storage Time	I _C = 6A , I _{B1} = 1.2A; I _{B2} = -2.4A; V _{CC} = 200V			3.0	μs
t _f	Fall Time				0.2	μs

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