

isc Silicon NPN Power Transistor

2SC3996

DESCRIPTION

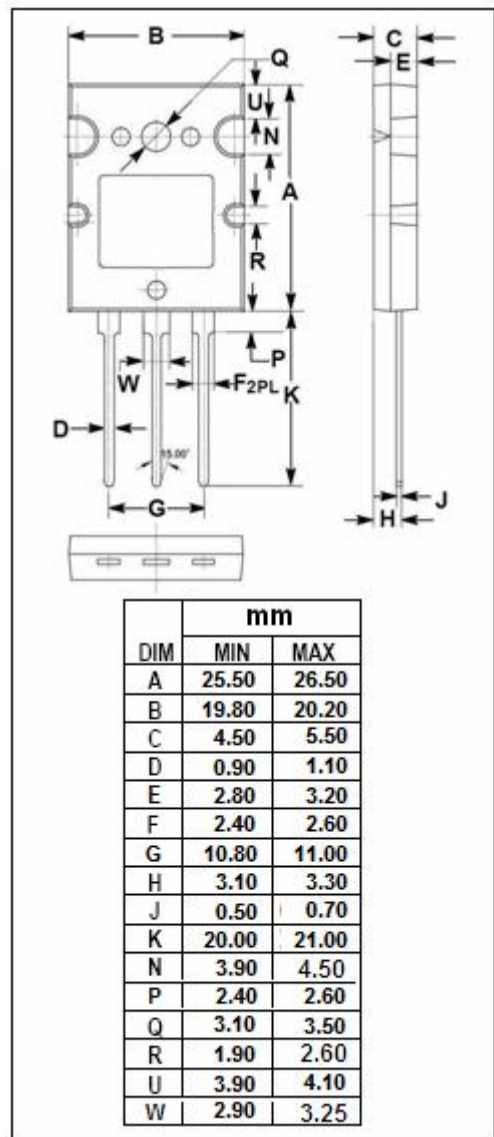
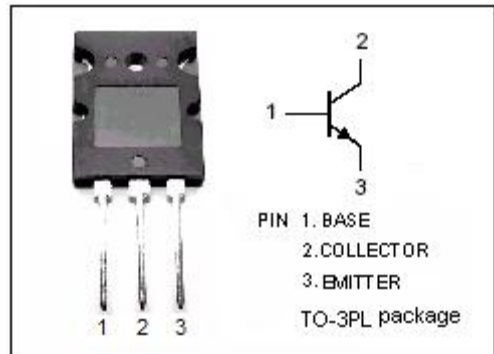
- High Switching Speed
- High Breakdown Voltage
: $V_{(BR)CBO} = 1500V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for 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	15	A
I_{CM}	Collector Current-Pulse	35	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	180	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3996****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 10mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 12A; I _B =3A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 12A; I _B =3A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 800V; I _E = 0			10	μ A
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-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	8		40	
h _{FE-2}	DC Current Gain	I _C = 12A; V _{CE} = 5V	4		8	
t _{stg}	Storage Time	I _C = 12A; I _{B1} =2.4A; I _{B2} = -4.8A			3.0	μ s
t _f	Fall Time				0.2	μ s

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