

isc Silicon NPN Power Transistor

2SD2296

DESCRIPTION

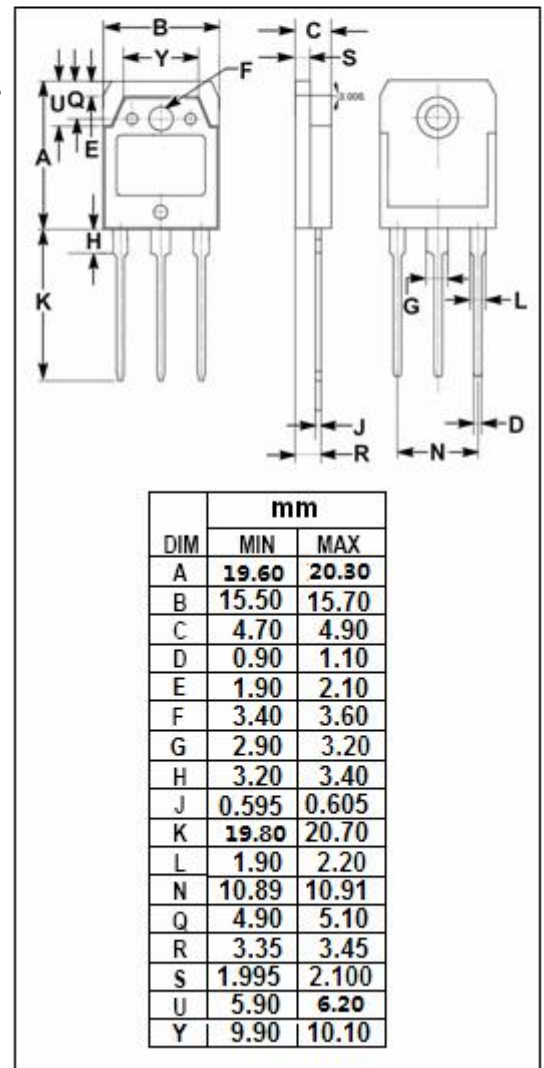
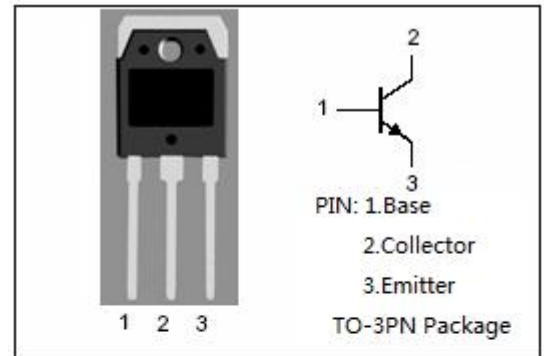
- High Breakdown Voltage
: $V_{CBO} = 1500V(\text{Min})$
- High Switching Speed
- With TO-3PN Package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for color TV 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	5	A
I_{CM}	Collector Current-Peak	8	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	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD2296****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	1500			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; R _{BE} = ∞	800			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4.5A; I _B = 1.2A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4.5A; I _B = 1.2A			1.5	V
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8		30	
I _{CBO}	Collector Cutoff Current	V _{CB} = 1500V; I _E = 0			0.5	mA
f _T	Transition Frequency	I _C = 0.5A ; V _{CE} = 10V		5		MHz
t _f	Fall Time	I _C = 4.0A; I _{B1} = 0.8A; I _{B2} = 1.5A			0.8	μ s

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