

isc Silicon NPN Power Transistor

2SC3336

DESCRIPTION

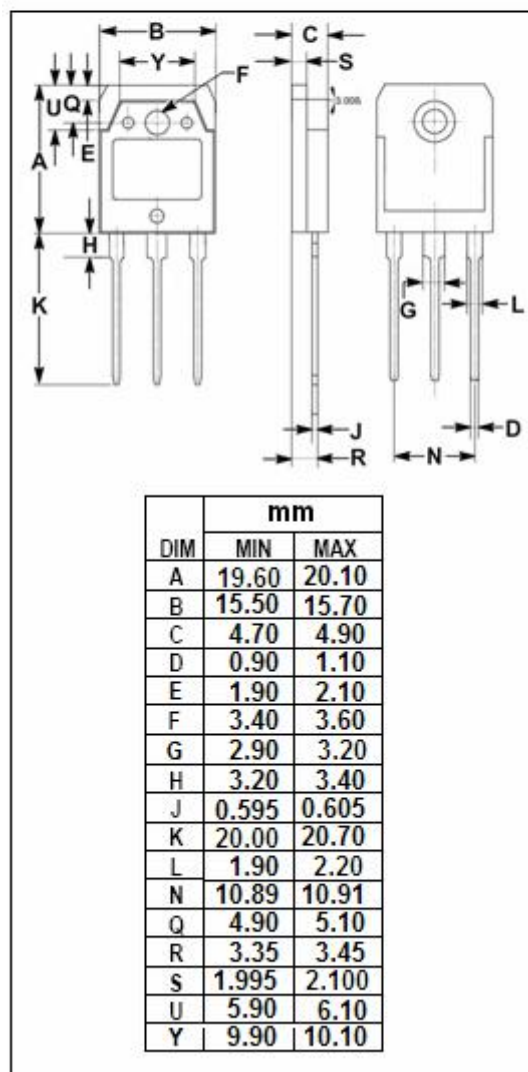
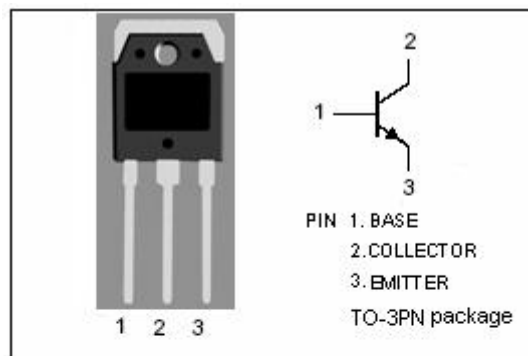
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 400V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high voltage, high speed and high power switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base voltage	10	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Current-Peak	25	A
I_B	Base Current-Continuous	7.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3336****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 = 20mA; I _B = 0	400			V
V _{CEX(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 15A; I _{B1} = 3A; I _{B2} = -1A; V _{BE} = -5V; L = 180 μH; Clamped	400			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 10mA; I _C = 0	10			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7.5A; I _B = 1.5A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 7.5A; I _B = 1.5A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 400V; I _E = 0			50	μA
I _{CEO}	Collector Cutoff Current	V _{CE} = 350V; R _{BE} = ∞			50	μA
h _{FE-1}	DC Current Gain	I _C = 7.5A; V _{CE} = 5V	12			
h _{FE-2}	DC Current Gain	I _C = 15A; V _{CE} = 5V	5			

Switching times

t _{on}	Turn-on Time	I _C = 15A, I _{B1} = -I _{B2} = 3A; V _{CC} ≈ 250V			0.5	μs
t _{stg}	Storage Time				1.5	μs
t _f	Fall Time				0.5	μs

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