

isc Silicon NPN Power Transistor
2SC3737
DESCRIPTION

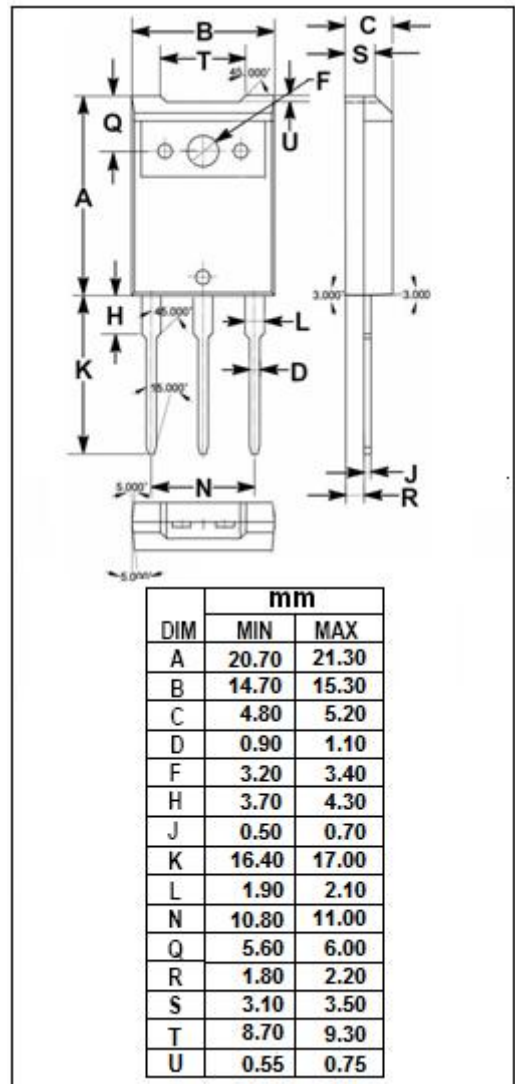
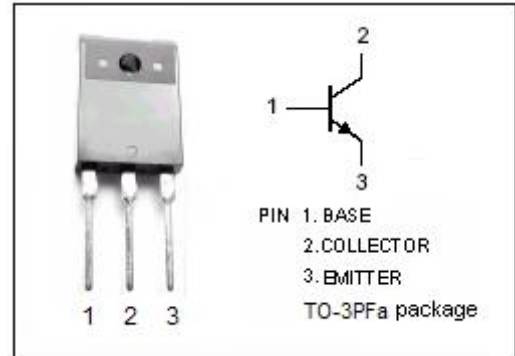
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 800V(\text{Min})$
- High Switching Speed
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high speed switching and horizontal deflection output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1200	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 0.4A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A; I _B = 0.4A			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 1000V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			100	μ A
h _{FE}	DC Current Gain	I _C = 2A; V _{CE} = 5V	6		20	
Switching times						
t _{on}	Turn-On Time	I _C = 2A; I _{B1} = 0.4A, I _{B2} = -0.8A; V _{CC} = 250V			1.0	μ s
t _{stg}	Storage Time				3.5	μ s
t _f	Fall Time				0.3	μ s

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