

isc Silicon NPN Power Transistor

2SC3737

DESCRIPTION

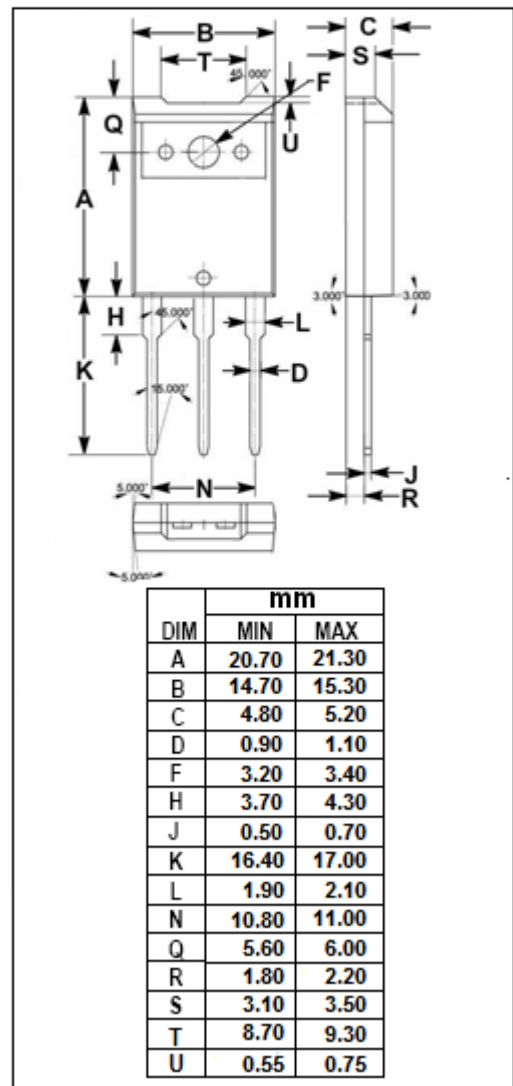
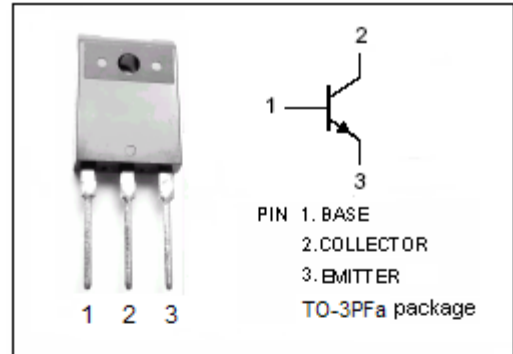
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 800V(\text{Min})$
- High Switching Speed
- Wide Area of Safe Operation

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	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3737****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; I_B=0$	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.4\text{A}$			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.4\text{A}$			2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=1000\text{V}; I_E=0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			100	μA
h_{FE}	DC Current Gain	$I_C=2\text{A}; V_{CE}=5\text{V}$	6		20	

Switching times

t_{on}	Turn-On Time	$I_C=2\text{A}; I_{B1}=0.4\text{A}, I_{B2}=-0.8\text{A}; V_{CC}=250\text{V}$			1.0	μs
t_{stg}	Storage Time				3.5	μs
t_f	Fall Time				0.3	μs