

isc Silicon NPN Power Transistor

2SC2233

DESCRIPTION

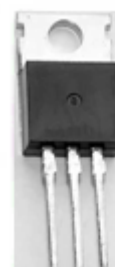
- Collector-Emitter Breakdown Voltage-
: $V_{CEO} = 60V(\text{Min})$
- DC Current Gain-
: $h_{FE} = 30(\text{Min})@ (V_{CE} = 5V, I_C = 1A)$
- High Collector Current
- High Collector Power Dissipation

APPLICATIONS

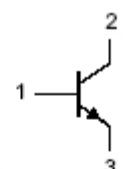
- TV Horizontal Deflection Output Application

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

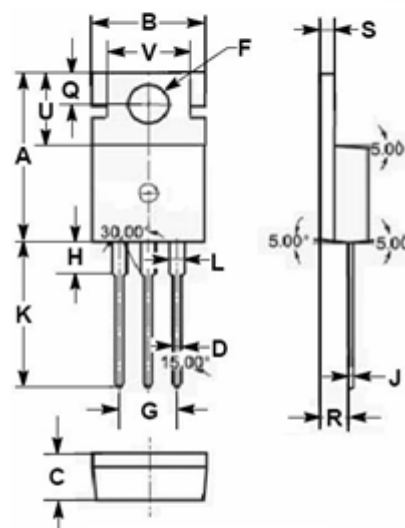
SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.5	W
	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	40	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



1 2 3



PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-220C package



DIM	mm	
	MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

ISC Silicon NPN Power Transistor**2SC2233****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B =0.4A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4A; I _B =0.4A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 170V ; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	30		150	
h _{FE-2}	DC Current Gain	I _C = 4A ; V _{CE} = 5V	20			
f _T	Current-Gain—Bandwidth Product	I _C = 500mA; V _{CE} = 5V		8		MHz