

isc Silicon NPN Power Transistors

ISC235

DESCRIPTION

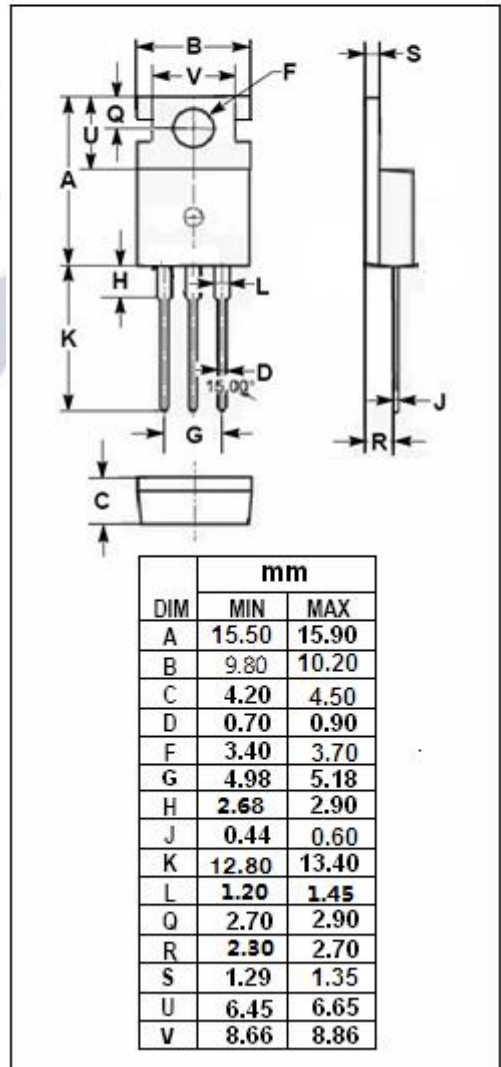
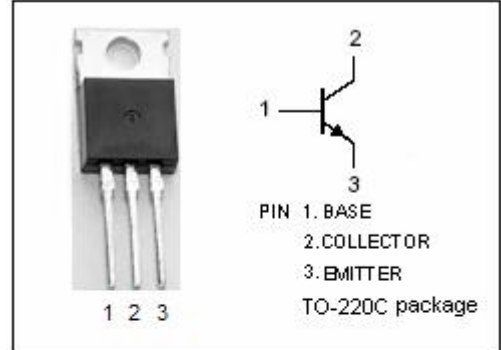
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.6V(\text{Max}) @ I_C = 3A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 75V (\text{Min})$

APPLICATIONS

- Designed for use in high power output amplifier stages
Such as citizen band communications equipment

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	75	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	5	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	1.2	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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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 = 1mA ; R _{BE} =150 Ω	75			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 100 μ A; I _E = 0	80			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 100 μ A; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B =100mA		0.15	0.6	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1A; I _B = 100mA		0.9	1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			10	μ A
h _{FE}	DC current gain	I _C =500mA ; V _{CE} = 5V	25		200	
f _T	Current-Gain—Bandwidth Product	I _C =100mA ; V _{CE} = 10V	100	150		MHz