

isc Silicon NPN Power Transistor

2SC3257

DESCRIPTION

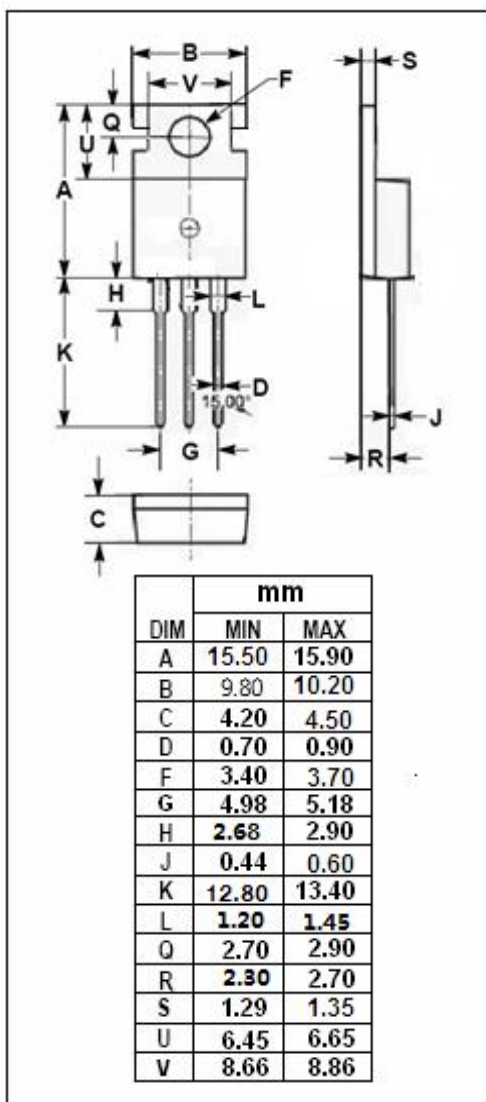
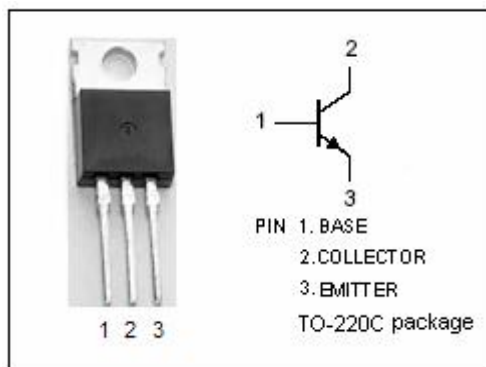
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching regulator and high voltage switching applications.
- High speed DC-DC converter applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current-Continuous	2	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	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3257****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	200			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	250			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 200V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 10mA; V _{CE} = 5V	15			
h _{FE-2}	DC Current Gain	I _C = 5A; V _{CE} = 5V	20		80	
Switching times						
t _r	Rise Time	I _{B1} = -I _{B2} = 0.6A; R _L = 25 Ω ; V _{CC} ≈ 150V			1.0	μ s
t _{stg}	Storage Time				2.5	μ s
t _f	Fall Time				1.0	μ s

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