

isc Silicon NPN Power Transistor
2SD717
DESCRIPTION

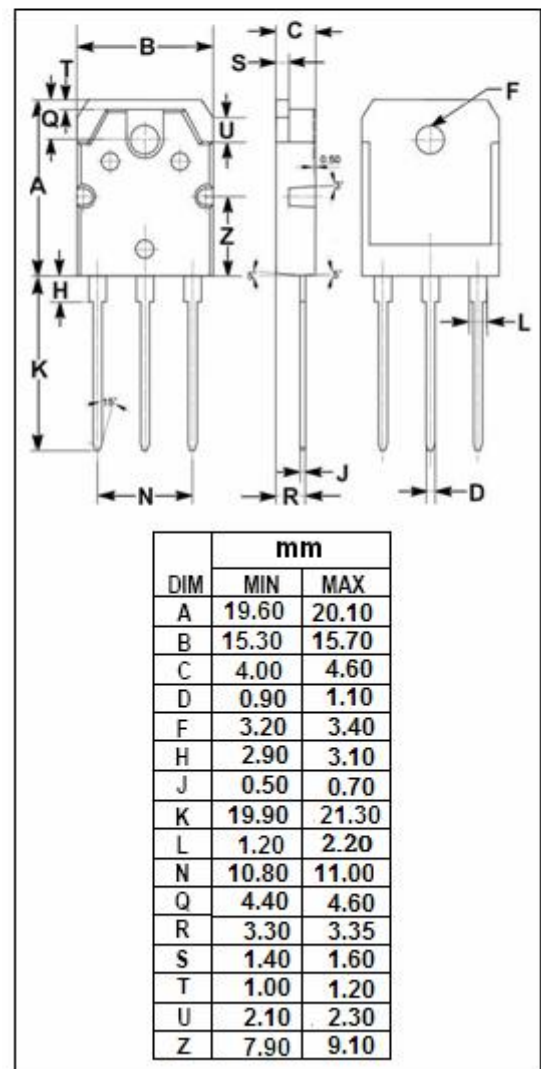
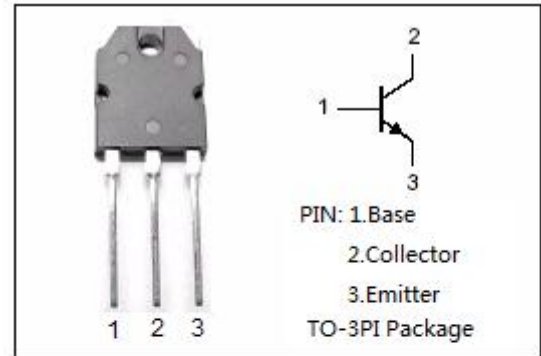
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 50V$ (Min)
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 0.4V$ (Max)@ $I_C = 6.0A$
- High Collector Power Dissipation
: $P_C = 80W$ @ $T_C = 25^\circ C$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High power switching applications
- DC-DC converter and DC-AC inverter applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
I_B	Base Current-Continuous	2.5	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	80	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD717****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 ; I _B = 0	50			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 6A; I _B = 0.3A			0.4	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 6A; I _B = 0.3A			1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 70V ; 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} = 1V	70		240	
h _{FE-2}	DC Current Gain	I _C = 6A ; V _{CE} = 1V	30			

◆ **h_{FE-1} Classifications**

O	Y
70-140	120-240

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