

isc Silicon NPN Power Transistor
2SD1588
DESCRIPTION

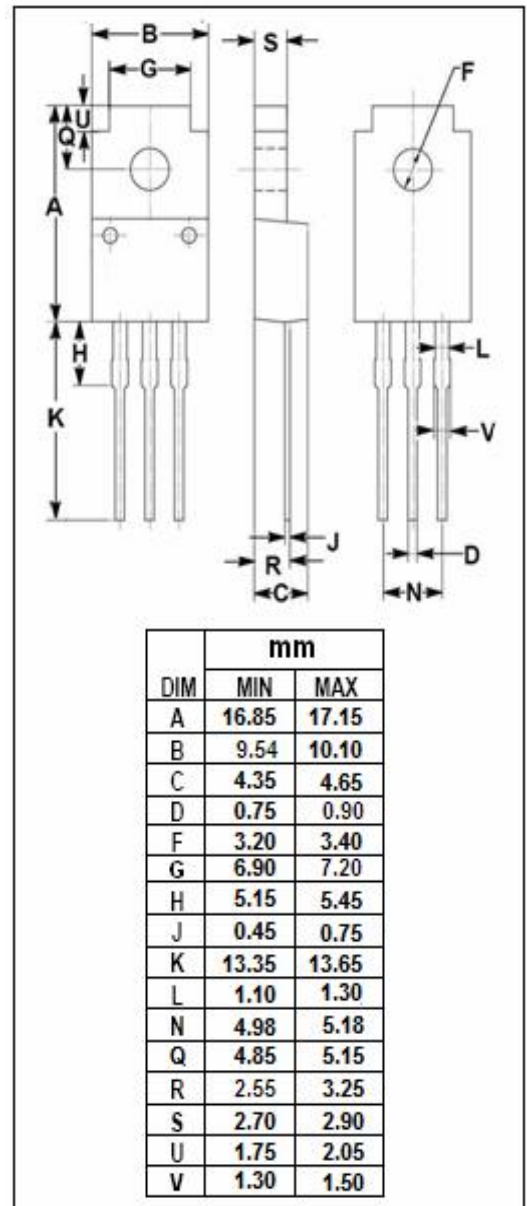
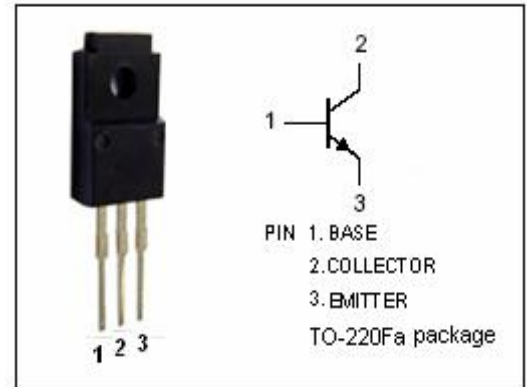
- Large Current Capacity- $I_C= 7A$
- Low Collector Saturation Voltage
: $V_{CE(sat)}= 0.5V(Max)@ I_C= 5A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)}= 60V (Min)$
- Complement to Type 2SB1097
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifiers and low speed switching applications which is ideal for use in ramp drivers or inductance drivers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current-Continuous	3.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	30	W
	Collector Power Dissipation @ $T_a=25^\circ C$	2	
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 _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 0.1A ; I _B = 0	60			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			0.5	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} = 80V; I _E = 0			10	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μA
h _{FE-1}	DC Current Gain	I _C = 3A ; V _{CE} = 1V	40		200	
h _{FE-2}	DC Current Gain	I _C = 5A ; V _{CE} = 1V	20			

◆ h_{FE-1} classifications

M	L	K
40-80	60-120	100-200

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