

isc Silicon PNP Power Transistor

2SB1038

DESCRIPTION

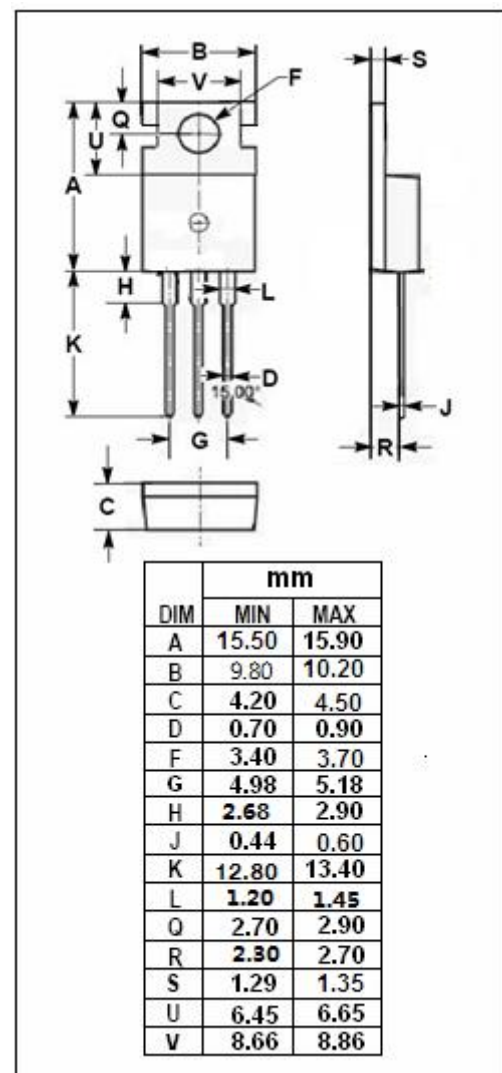
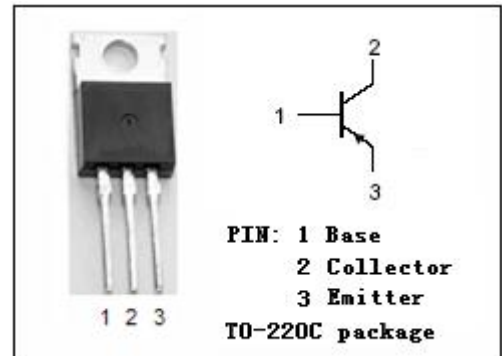
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -60V(\text{Min.})$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.5V(\text{Max})@I_C = -2A$
- Complement to Type 2SD1310
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-3	A
I_{CM}	Collector Current-Peak	-5	A
I_B	Base Current-Continuous	-0.6	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	30	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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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 = -10mA; I _B = 0	-60			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -2A; I _B = -0.2A			-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -2A; I _B = -0.2A			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -60V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -50mA; V _{CE} = -5V	20			
h _{FE-2}	DC Current Gain	I _C = -0.5A; V _{CE} = -5V	40		200	
f _T	Current-Gain—Bandwidth Product	I _C = -0.1A; V _{CE} = -5V		20		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		70		pF

◆ h_{FE-2} Classifications

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

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