

isc Silicon PNP Power Transistor
2SB1033
DESCRIPTION

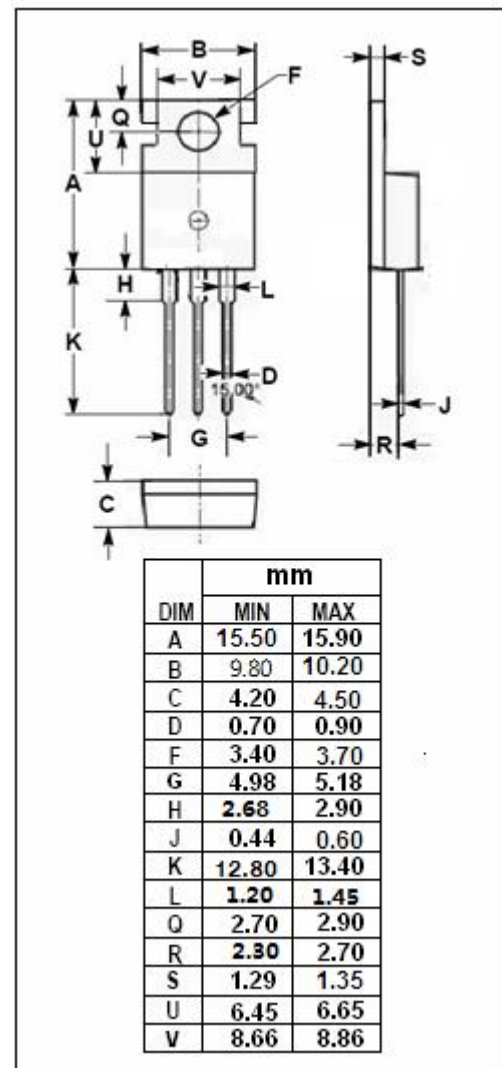
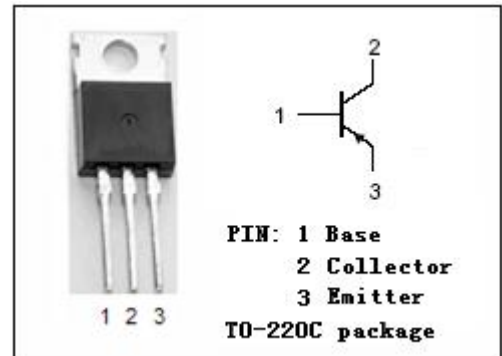
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -60V(\text{Min.})$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.5V(\text{Max})@I_C = -2A$
- Complement to Type 2SD1437
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	-5	V
I_C	Collector Current-Continuous	-3	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	40	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 _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -1mA; I _E = 0	-60			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-6			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			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -60V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-10	μ A
h _{FE}	DC Current Gain	I _C = -0.5A; V _{CE} = -5V	60		320	
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -5V		12		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		100		pF

◆ h_{FE} Classifications

D	E	F
60-120	100-200	160-320

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