

DESCRIPTION

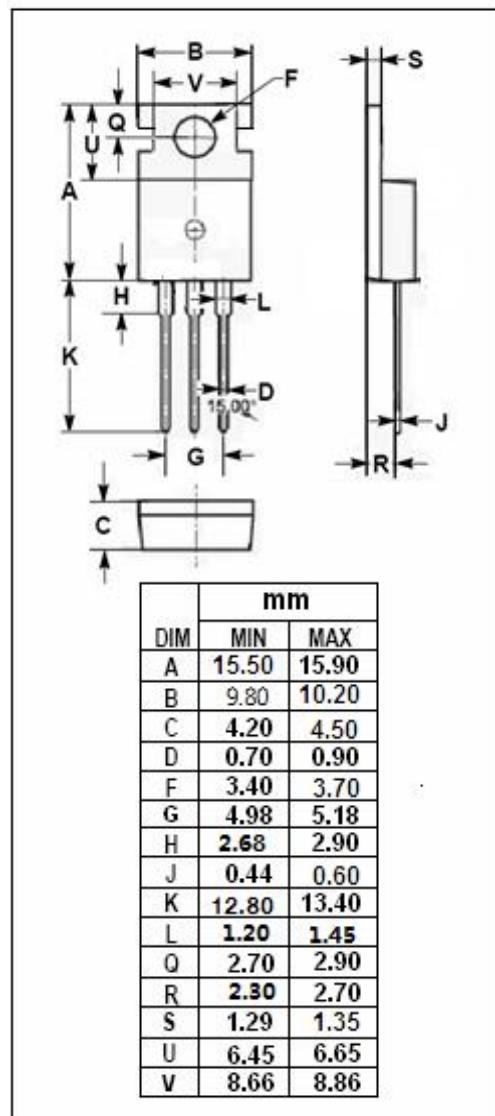
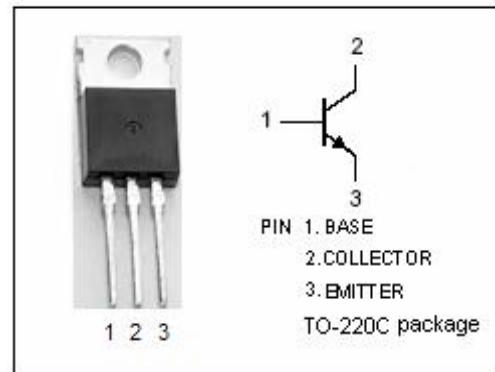
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 1.0V(\text{Max}) @ I_C = 2A$
- Wide Area of Safe Operation
- Complement to Type 2SB1064
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	4.5	A
P_C	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	W
	Total Power Dissipation @ $T_c=25^\circ\text{C}$	30	
T_J	Junction Temperature	150	°C
T_{Stg}	Storage Temperature Range	-55~150	°C



ELECTRICAL CHARACTERISTICS

 $T_c=25^\circ C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C= 1\text{mA}; I_B= 0$	50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 50 \mu\text{A}; I_E= 0$	60			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 50 \mu\text{A}; I_C= 0$	5			V
$V_{CE(\text{sat})}$	Collector-Emitter Saturation Voltage	$I_C= 2\text{A}; I_B= 0.2\text{A}$			1.0	V
$V_{BE(\text{sat})}$	Base-Emitter Saturation Voltage	$I_C= 2\text{A}; I_B= 0.2\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 40\text{V}; I_E= 0$			1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 4\text{V}; I_C= 0$			1.0	μA
h_{FE}	DC Current Gain	$I_C= 0.5\text{A}; V_{CE}= 3\text{V}$	60		320	
f_T	Current-Gain—Bandwidth Product	$I_C= 0.5\text{A}; V_{CE}= 5\text{V}$		90		MHz
C_{OB}	Output Capacitance	$I_E= 0; V_{CB}= 10\text{V}; f= 1\text{MHz}$		40		pF

◆ h_{FE} Classifications

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

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