

ISC Silicon NPN Power Transistor

2SD608

DESCRIPTION

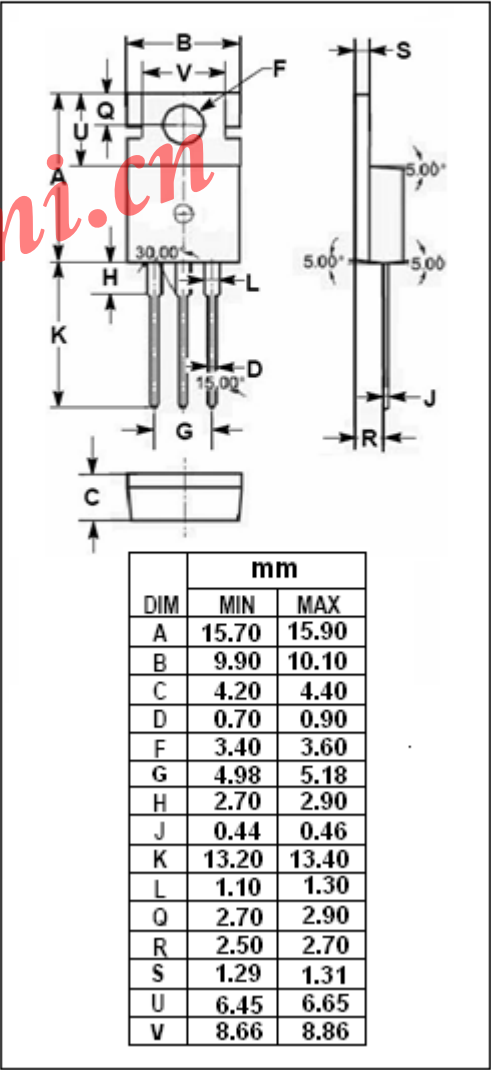
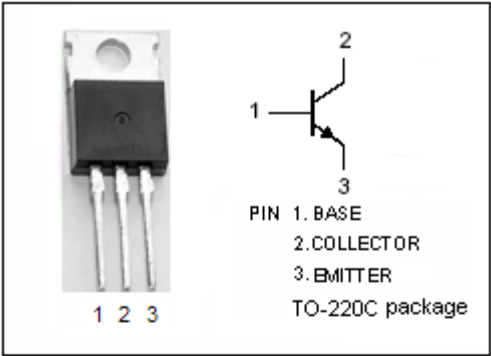
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 160V(\text{Min})$
- Complement to Type 2SB628

APPLICATIONS

- Designed for audio frequency power amplifier and low speed switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_{CM}	Collector Current-Peak	3.0	A
I_B	Base Current-Continuous	0.3	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$	1.5	W
	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	20	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1\text{A}; I_B=0.1\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=1\text{A}; I_B=0.1\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=120\text{V}; I_E=0$			1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=3\text{V}; I_C=0$			1.0	μA
h_{FE-1}	DC Current Gain	$I_C=5\text{mA}; V_{CE}=5\text{V}$	25			
h_{FE-2}	DC Current Gain	$I_C=0.3\text{A}; V_{CE}=5\text{V}$	40		200	
C_{OB}	Collector Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f=1\text{MHz}$		35		pF
f_T	Current-Gain—Bandwidth Product	$I_C=0.1\text{A}; V_{CE}=5\text{V}$		40		MHz

◆ h_{FE-2} Classifications

S	R	Q
40-80	60-120	100-200