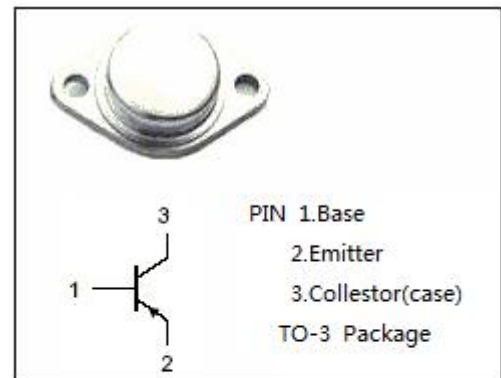


**isc Silicon PNP Power Transistors**
**2SB612**
**DESCRIPTION**

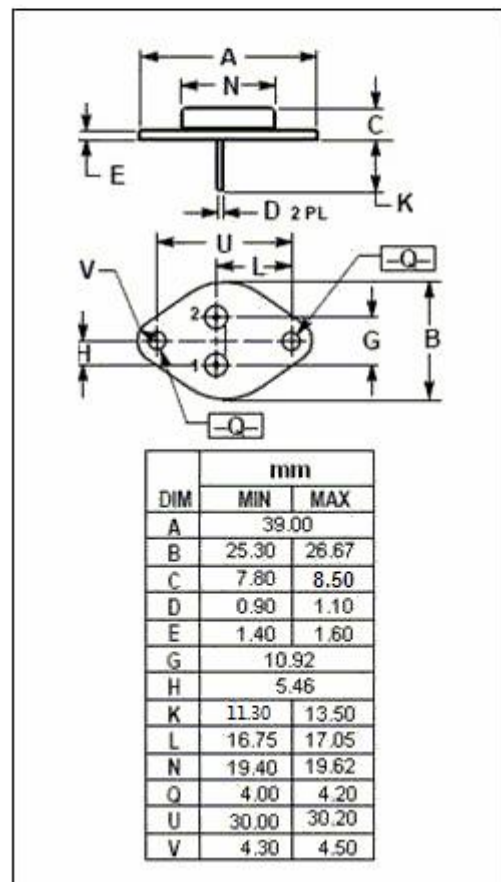
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -140V(\text{Min})$
- High Power Dissipation-  
:  $P_C = 100W(\text{Max})@T_C = 25^\circ\text{C}$
- Complement to Type 2SD582
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Recommended for 80~100W audio amplifier output stage.


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-180	V
$V_{CEO}$	Collector-Emitter Voltage	-140	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-12	A
$I_{CM}$	Collector Current-Peak	-15	A
$I_B$	Collector Current-Continuous	-2	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	100	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistors**
**2SB612**
**ELECTRICAL CHARACTERISTICS**

 T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -30mA; R <sub>BE</sub> = ∞	-140			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -5mA; I <sub>C</sub> = 0	-6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -7A; I <sub>B</sub> = -0.7A			-1.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -160V; I <sub>E</sub> = 0			-10	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	35		200	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -7A; V <sub>CE</sub> = -5V	20			

**◆ h<sub>FE-1</sub> Classifications**

A	B	C
35-70	60-120	100-200

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