

**isc Silicon PNP Power Transistor**

**2SB812**

**DESCRIPTION**

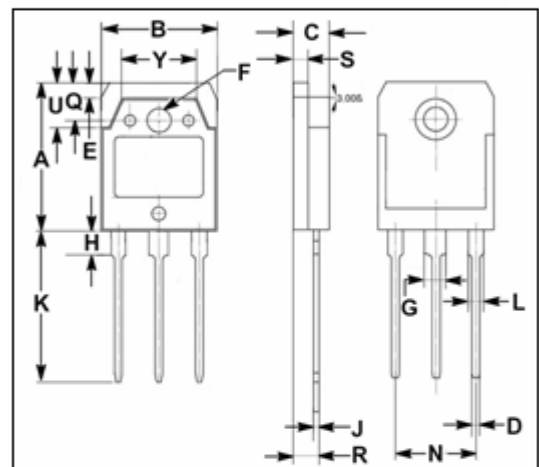
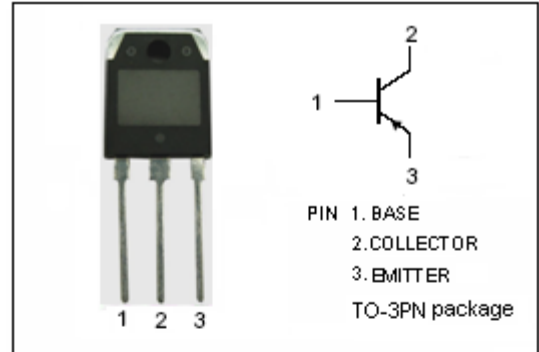
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -60V(\text{Min})$
- High Power Dissipation
- Complement to Type 2SD1032

**APPLICATIONS**

- Designed for AF 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	-4	A
$I_{CM}$	Collector Current-Peak	-8	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	60	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.38	15.42
C	4.75	4.85
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.98	3.02
H	3.20	3.40
J	0.595	0.605
K	19.95	20.25
L	1.98	2.02
N	10.89	10.91
Q	4.95	5.05
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

**isc Silicon PNP Power Transistor****2SB812****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -30\text{mA}; I_B = 0$	-60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}; I_B = -0.4\text{A}$			-1.5	V
$V_{BE(on)}$	Base -Emitter On Voltage	$I_C = -3\text{A}; V_{CE} = -4\text{V}$			-2.0	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -30\text{V}; I_B = 0$			-700	$\mu\text{A}$
$I_{CES}$	Collector Cutoff Current	$V_{CE} = -60\text{V}; V_{BE} = 0$			-400	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -4\text{V}$	40		250	
$h_{FE-2}$	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -4\text{V}$	15			

## Switching times

$t_{on}$	Turn-on Time	$I_C = -4\text{A}, I_{B1} = -I_{B2} = -0.4\text{A}$		0.2		$\mu\text{s}$
$t_{off}$	Turn-Off Time			1.4		$\mu\text{s}$

◆  **$h_{FE-1}$  Classifications**

R	Q	P
40-90	70-150	120-250