

isc Silicon PNP Power Transistor

2SB980

DESCRIPTION

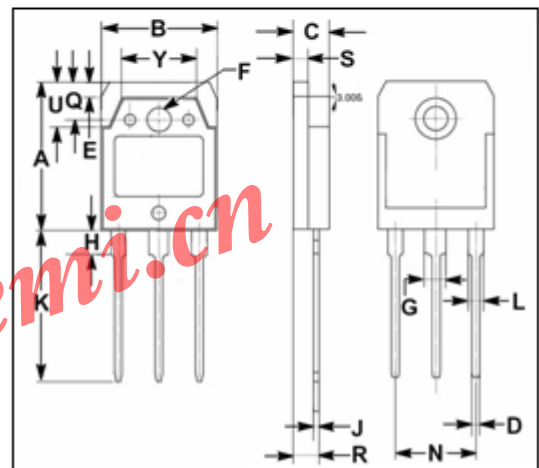
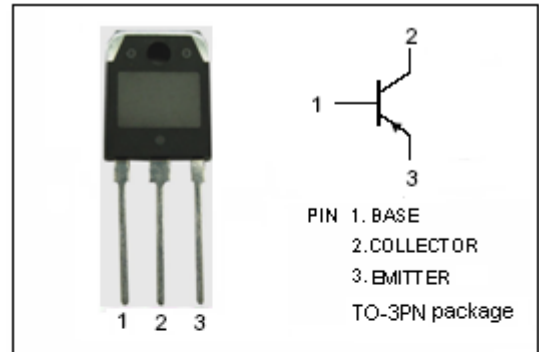
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -120V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Wide Area of Safe Operation

APPLICATIONS

- Designed for high power amplifications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-120	V
$V_{CEO}$	Collector-Emitter Voltage	-120	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-6	A
$I_{CP}$	Collector Current-Pulse	-10	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	70	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3	
$T_J$	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****2SB980****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	$I_C = -4\text{A}; I_B = -0.4\text{A}$			-2.0	V
$V_{BE(on)}$	Base -Emitter On Voltage	$I_C = -4\text{A}; V_{CE} = -5\text{V}$			-1.8	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -120\text{V}; I_E = 0$			-50	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -3\text{V}; I_C = 0$			-50	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -20\text{mA}; V_{CE} = -5\text{V}$	20			
$h_{FE-2}$	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -5\text{V}$	60		200	
$h_{FE-3}$	DC Current Gain	$I_C = -4\text{A}; V_{CE} = -5\text{V}$	20			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}; f = 1\text{MHz}$		20		MHz
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1\text{MHz}$		150		pF

◆  **$h_{FE-2}$  Classifications**

Q	S	P
60-120	80-160	100-200