

isc Silicon PNP Power Transistor

2SB682

DESCRIPTION

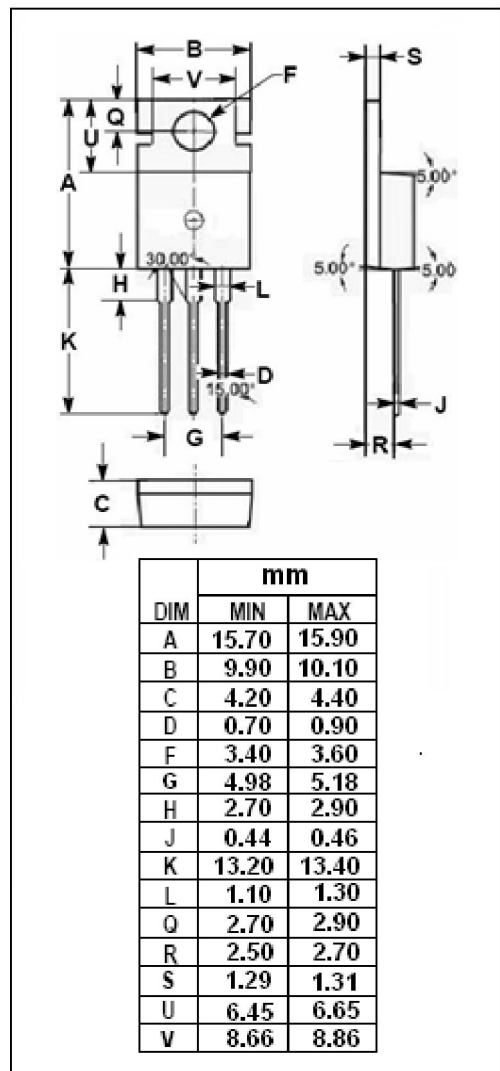
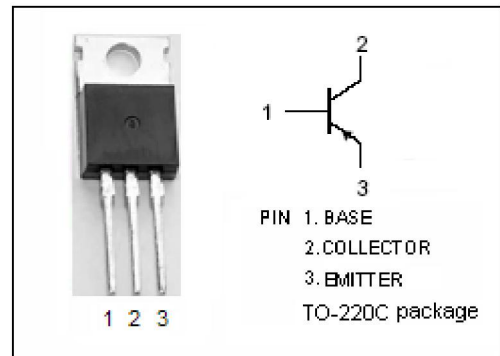
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -100V(\text{Min})$
- High Power Dissipation
- Wide Area of Safe Operation

APPLICATIONS

- Designed for low frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_c	Collector Current-Continuous	-4	A
P_c	Total Power Dissipation @ $T_a=25^{\circ}C$	1.5	W
	Total Power Dissipation @ $T_c=25^{\circ}C$	30	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-40~150	$^{\circ}C$



isc Silicon PNP Power Transistor**2SB682****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	$I_C = -10\text{mA}; R_{BE} = \infty$	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -5\text{mA}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3\text{A}; I_B = -0.3\text{A}$			-1.7	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -3\text{A}; V_{CE} = -5\text{V}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -100\text{V}; I_E = 0$			-30	μA
I_{CEO}	Collector Cutoff Current	$V_{CE} = -100\text{V}; R_{BE} = \infty$			-0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-0.1	mA
h_{FE-1}	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}$	55		300	
h_{FE-2}	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -5\text{V}$	15			
C_{OB}	Collector Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1\text{MHz}$		75		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -10\text{V}$		8		MHz

◆ **h_{FE-1} Classifications**

C	D	E
55-110	90-180	150-300