

isc Silicon PNP Power Transistor

2SA680

DESCRIPTION

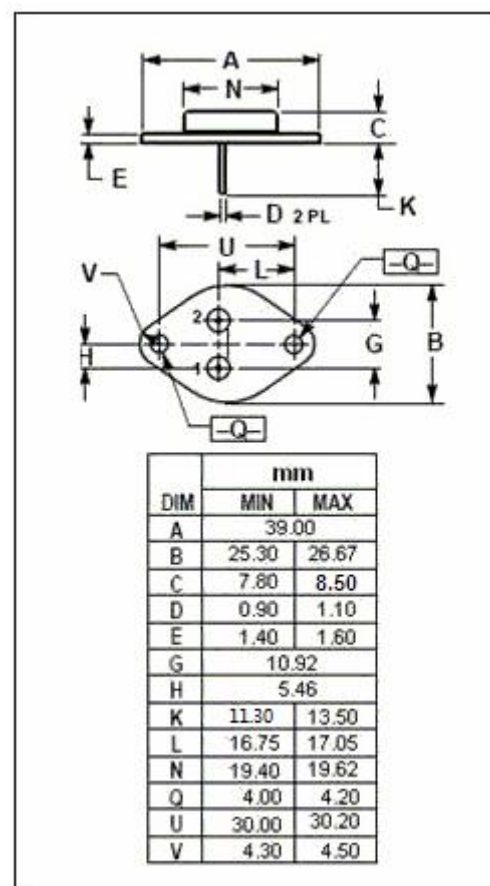
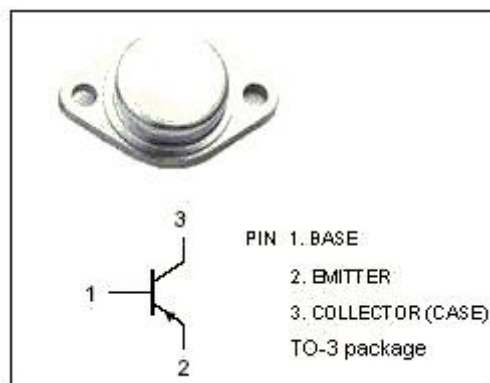
- High Power Dissipation-
: $P_C = 100W(\text{Max.})@T_C=25^{\circ}C$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -100V(\text{Min.})$
- Complement to Type 2SC1080
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio 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	-12	A
I_E	Emitter Current-Continuous	12	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	100	W
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-65~150	$^{\circ}C$



isc Silicon PNP Power Transistor**2SA680****ELECTRICAL CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA ; I _B = 0	-100			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA ; I _C = 0	-5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1A			-3.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -10A ; V _{CE} = -5V			-2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -50V; I _E = 0			-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-0.1	mA
h _{FE-1}	DC Current Gain	I _C = -2A ; V _{CE} = -5V	40		140	
h _{FE-2}	DC Current Gain	I _C = -7A ; V _{CE} = -5V	15			
C _{OB}	Output Capacitance	V _{CB} = -10V; f _{test} = 1MHz		900		pF
f _T	Current-Gain—Bandwidth Product	I _C = -2A ; V _{CE} = -5V		6		MHz

◆ **h_{FE-1} Classifications**

R	Y
40-80	70-140

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