

Silicon NPN Power Transistors

2SC1079 2SC1080

DESCRIPTION

- With TO-3 package
- Complement to type 2SA679/680
- High power dissipation

APPLICATIONS

- For audio power amplifier applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

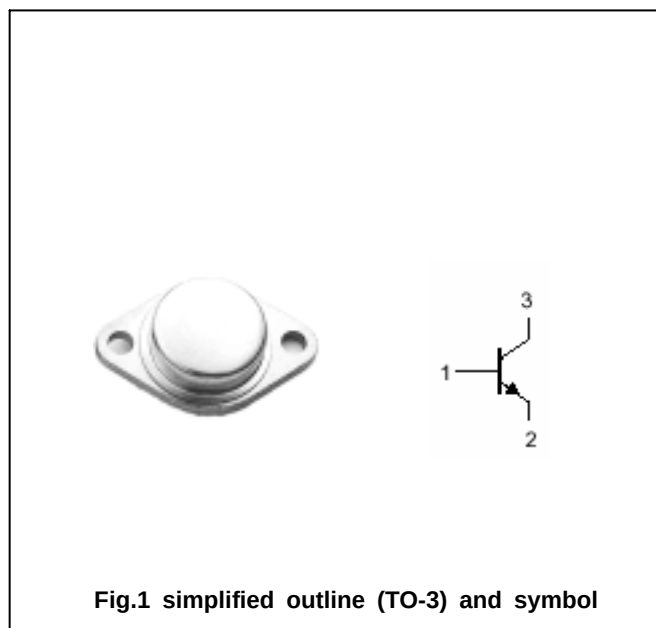


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a = ^\circ\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SC1079	Open emitter	120	V
		2SC1080		100	
V_{CEO}	Collector-emitter voltage	2SC1079	Open base	120	V
		2SC1080		100	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current			12	A
I_E	Emitter current			-12	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			-65~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	2SC1079	I _C =0.1A ; I _B =0	120			V
		2SC1080		100			
V _{(BR)EBO}	Emitter-base breakdown voltage		I _E =10mA ; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage		I _C =10A ; I _B =1A			3.0	V
V _{BE}	Base-emitter on voltage		I _C =10A ; V _{CE} =5V			2.5	V
I _{CBO}	Collector cut-off current		V _{CB} =50V ; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off 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			
f _T	Transition frequency		I _C =2A ; V _{CE} =5V		4		MHz

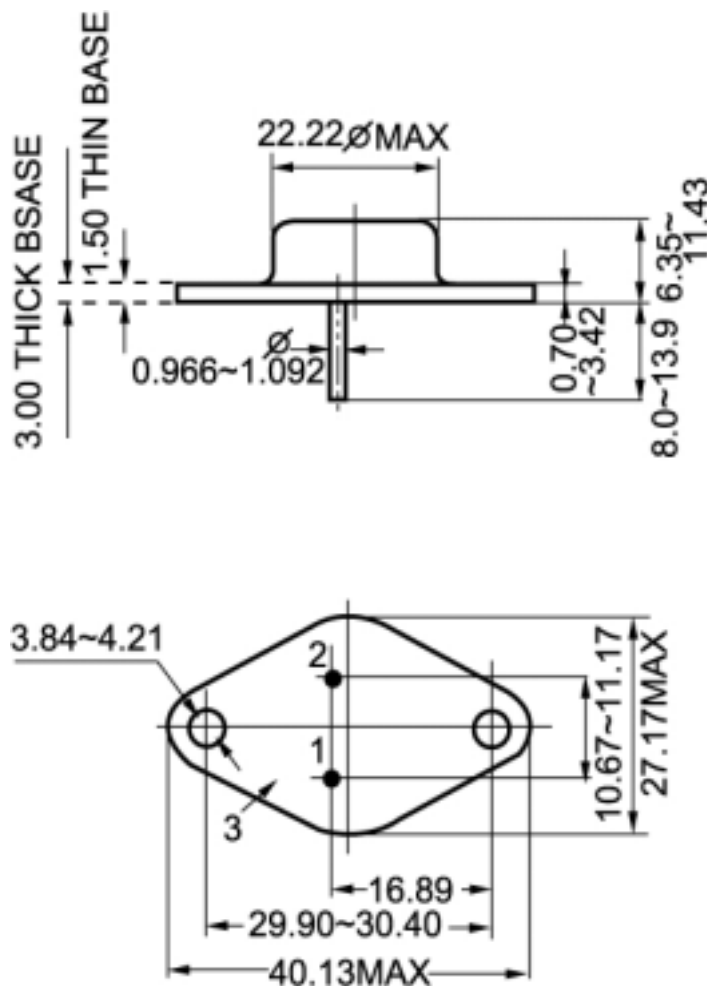
◆ h_{FE-1} Classifications

R	Y
40-80	70-140

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)