

SavantIC Semiconductor

Product Specification

Silicon PNP Power Transistors

2N6246 2N6247 2N6248

DESCRIPTION

- With TO-3 package
- Low collector saturation voltage
- Excellent safe operating area
- High gain at high current

APPLICATIONS

- General-purpose types of switching and linear-amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

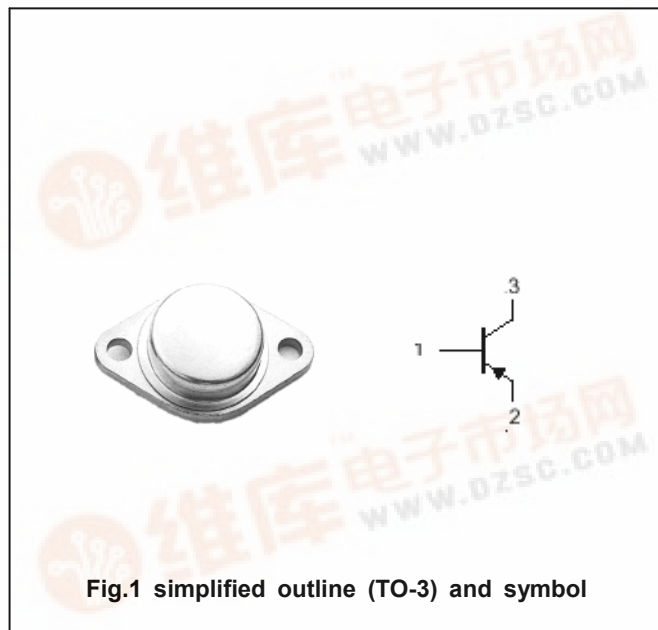


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6246	Open emitter	-70	V
		2N6247		-90	
		2N6248		-110	
V _{CEO}	Collector-emitter voltage	2N6246	Open base	-60	V
		2N6247		-80	
		2N6248		-100	
V _{EBO}	Emitter-base voltage		Open collector	-5	V
I _C	Collector current			-15	A
I _B	Base current			-5	A
P _T	Total power dissipation		T _C =25	125	W
T _j	Junction temperature			150	
T _{stg}	Storage temperature			-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1.4	/W

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CHARACTERISTICS

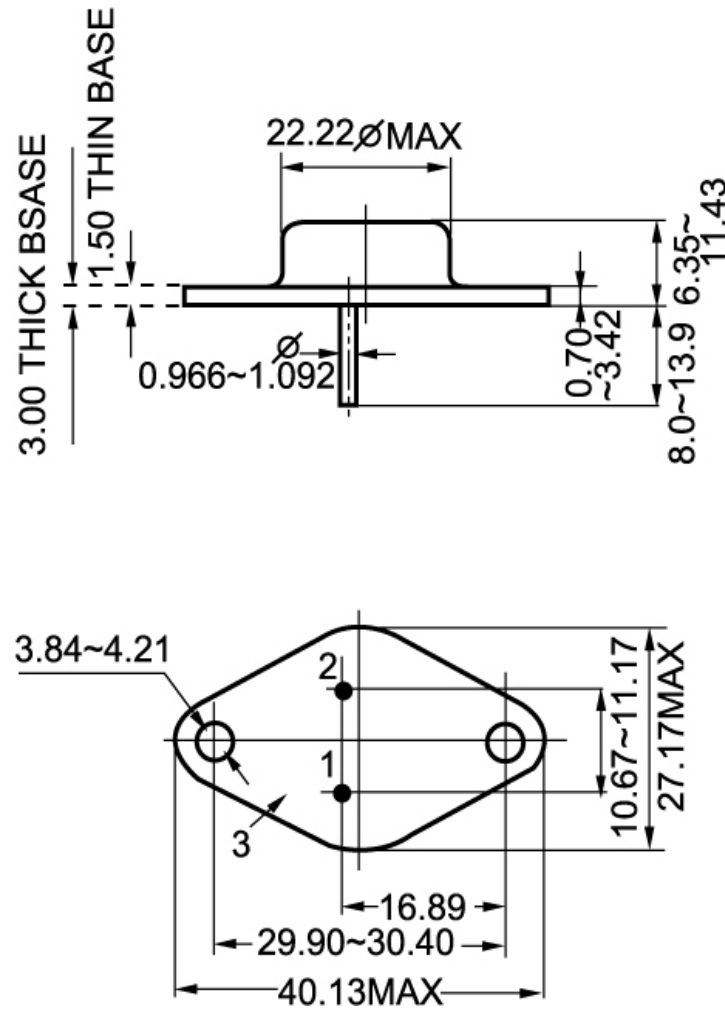
T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	2N6246	I _C =-0.2A ; I _B =0	-60			V
		2N6247		-80			
		2N6248		-100			
V _{CEsat-1}	Collector-emitter saturation voltage	2N6246	I _C =-7A; I _B =-0.7A			-1.3	V
		2N6247	I _C =-6A; I _B =-0.6A				
		2N6248	I _C =-5A; I _B =-0.5A				
V _{CEsat-2}	Collector-emitter saturation voltage	2N6246	I _C =-15A; I _B =-3A			-2.5	V
		2N6247	I _C =-15A; I _B =-4A			-3.5	
		2N6248	I _C =-10A; I _B =-2A				
V _{BE}	Base-emitter on voltage	2N6246	I _C =-7A ; V _{CE} =-4V			-2.0	V
		2N6247	I _C =-6A ; V _{CE} =-4V			-1.8	
		2N6248	I _C =-5A ; V _{CE} =-4V			-1.8	
I _{CEO}	Collector cut-off current		V _{CE} =1/2Rated V _{CEO} ; I _B =0			-1.0	mA
I _{CEX}	Collector cut-off current	2N6246	V _{CE} =-65V; V _{BE} =-1.5V V _{CE} =-55V; V _{BE} =-1.5V T _C =150			-0.2 -5.0	mA
		2N6247	V _{CE} =-85V; V _{BE} =-1.5V V _{CE} =-70V; V _{BE} =-1.5V T _C =150			-0.2 -5.0	
		2N6248	V _{CE} =-100V; V _{BE} =-1.5V V _{CE} =-90V; V _{BE} =-1.5V T _C =150			-0.2 -5.0	
I _{EBO}	Emitter cut-off current	2N6246	V _{EB} =-5V; I _C =0			-5.0	mA
		2N6247				-1.0	
		2N6248					
h _{FE-1}	DC current gain	2N6246	I _C =-7A ; V _{CE} =-4V	20		100	
		2N6247	I _C =-6A ; V _{CE} =-4V				
		2N6248	I _C =-5A ; V _{CE} =-4V				
h _{FE-2}	DC current gain	2N6246	I _C =-15A ; V _{CE} =-4V	5			
		2N6247	I _C =-15A ; V _{CE} =-4V				
		2N6248	I _C =-10A ; V _{CE} =-4V				

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PACKAGE OUTLINE

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