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
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.4	□/W

CHARACTERISTICS

Tj=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				

PACKAGE OUTLINE

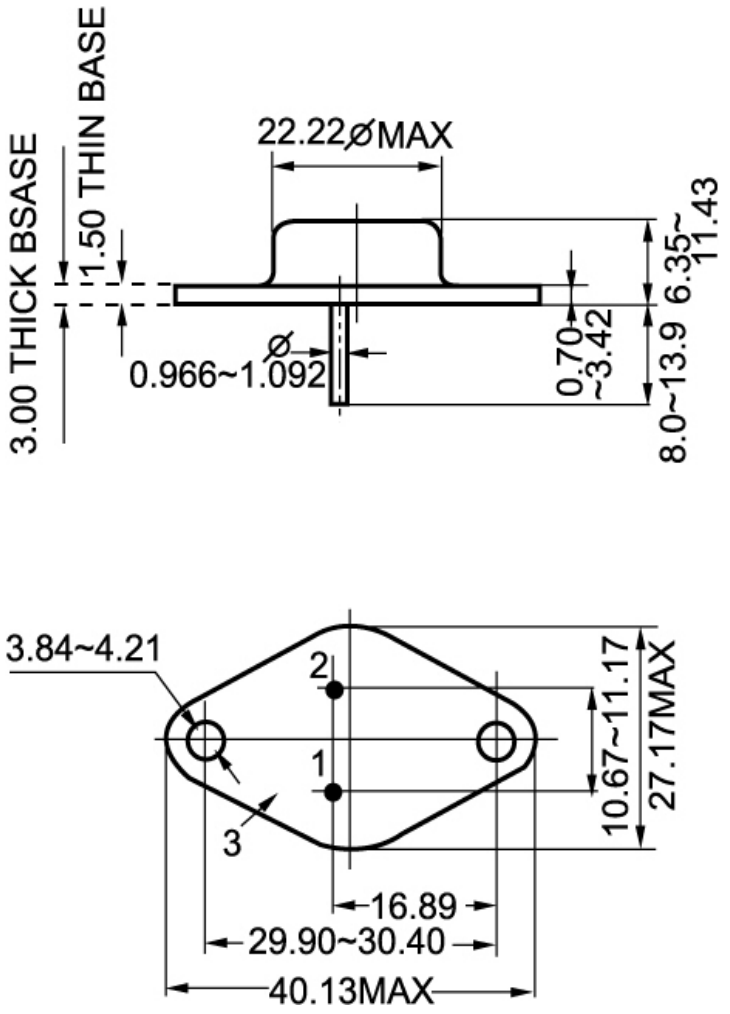

Fig.2 outline dimensions (unindicated tolerance:±0.1mm)