

Silicon NPN Power Transistors

PMD16K60/80/100

DESCRIPTION

- With TO-3 package
- High DC current gain
- DARLINGTON

APPLICATIONS

- Designed for use in power switching application.

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

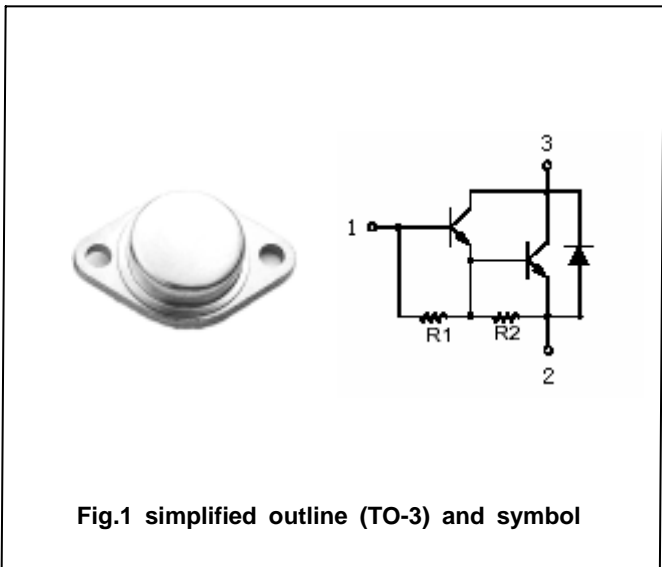


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	PMD16K60	60	V
		PMD16K80	80	
		PMD16K100	100	
V _{CEO}	Collector-emitter voltage	PMD16K60	60	V
		PMD16K80	80	
		PMD16K100	100	
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		20	A
I _{CM}	Collector current(peak)		40	A
I _B	Base current		0.5	A
P _D	Power dissipation	T _C =25	200	W
T _j	Max. operating Junction temperature		200	
T _{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance from junction to case	0.875	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	PMD16K60	I _C =0.1A ; I _B =0			V
		PMD16K80				
		PMD16K100				
V _{CEsat}	Collector-emitter saturation voltage	I _C =10A ; I _B =40mA			2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =10A ; I _B =40mA			2.8	V
V _{BE}	Base-emitter on voltage	I _C =10A ; V _{CE} =3V			2.8	V
h _{FE}	DC current gain	I _C =10A ; V _{CE} =3V	1000		20000	
I _{CER}	Collector cut-off current	V _{CE} =Rated V _{CEO} ; R _{BE} = T _C =150			1.0 5.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			2.0	mA
f _T	Transition frequency	I _C =7A ; V _{CE} =3V; f=1.0kHz	4.0			MHz
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V; f=1.0MHz			400	pF

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PACKAGE OUTLINE

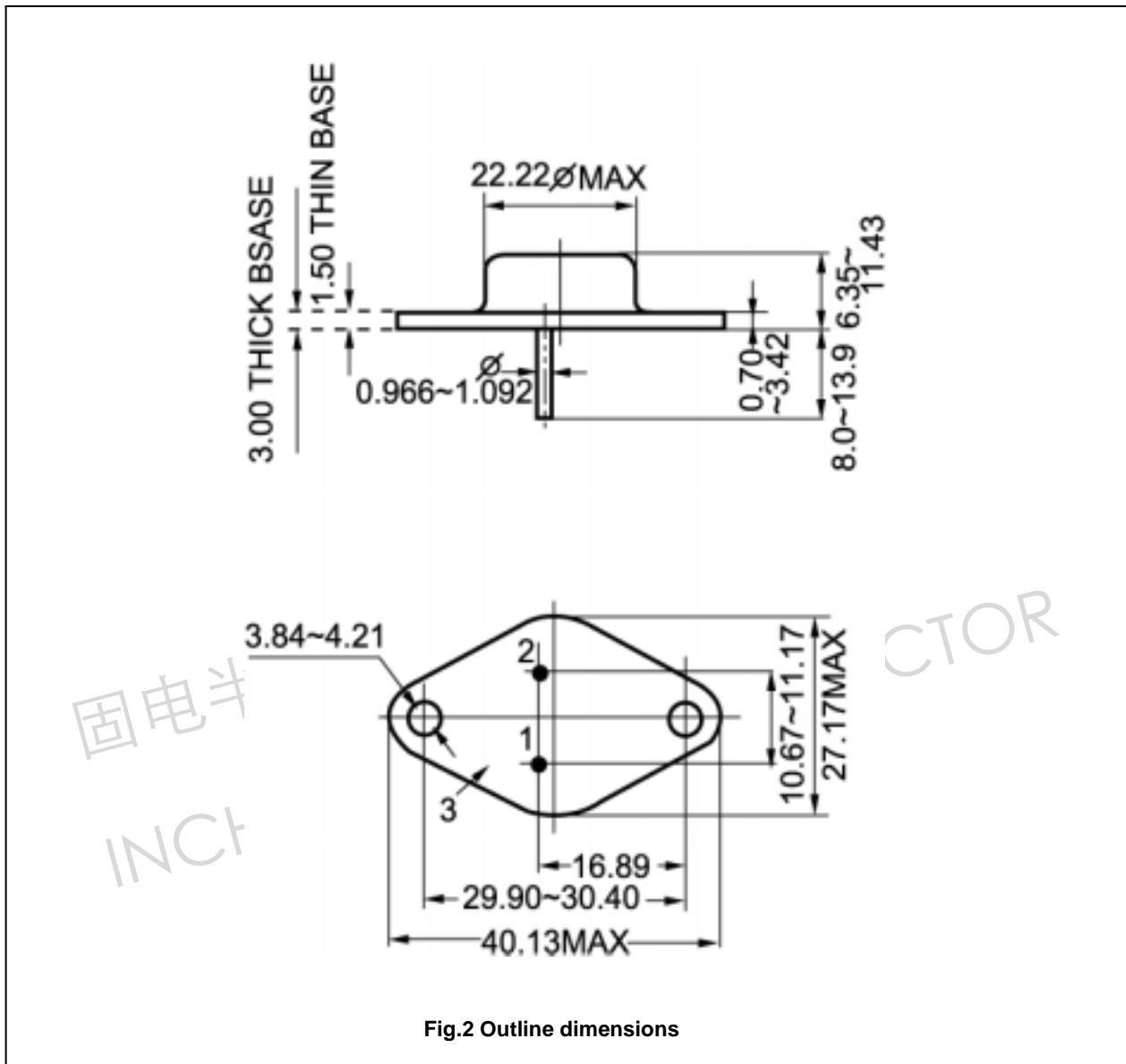


Fig.2 Outline dimensions