

DESCRIPTION

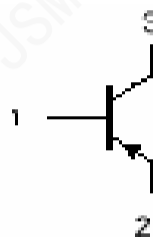
- With TO-3 package
- Complement to type MJ15003G
- Excellent safe operating area

APPLICATIONS

- For high power audio, disk head positioners and other linear applications


PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector


Fig.1 simplified outline (TO-3) and symbol
Absolute maximum ratings(Ta=°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CB0}	Collector-base voltage	Open emitter	-140	V
V _{CEO}	Collector-emitter voltage	Open base	-140	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-20	A
I _B	Base current		-5	A
I _E	Emitter current		25	A
P _D	Total power dissipation	T _C =25°C	250	W
T _j	Junction temperature		200	°C
T _{stg}	Storage temperature		-65~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{thj-c}	Thermal resistance junction to case	0.7	°C/W

CHARACTERISTICS $T_j=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE0(SUS)}$	Collector-emitter sustaining voltage	$I_C=-0.2A; I_B=0$	-140			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-5A; I_B=-0.5A$			-1.0	V
V_{BE}	Base-emitter on voltage	$I_C=-5A; V_{CE}=-2V$			-2.0	V
I_{CEO}	Collector cut-off current	$V_{CE}=-140V; I_B=0$			-0.25	mA
I_{CEX}	Collector cut-off current	$V_{CE}=-140V; V_{BE(off)}=-1.5V$ $T_C=150^{\circ}\text{C}$			-0.1 -2.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V; I_C=0$			-0.1	mA
h_{FE}	DC current gain	$I_C=-5A; V_{CE}=-2V$	25		150	
$I_{s/b}$	Second breakdown collector current With base forward biased	$V_{CE}=-50Vdc, t=1\text{ s, Nonrepetitive}$	-5			A
		$V_{CE}=-100Vdc, t=1\text{ s, Nonrepetitive}$	-1			
C_{OB}	Output capacitance	$I_E=0; V_{CB}=-10V; f=1.0\text{MHz}$			1000	pF
f_T	Transition frequency	$I_C=-0.5A; V_{CE}=-10V; f=0.5\text{MHz}$	2			MHz

PACKAGE OUTLINE

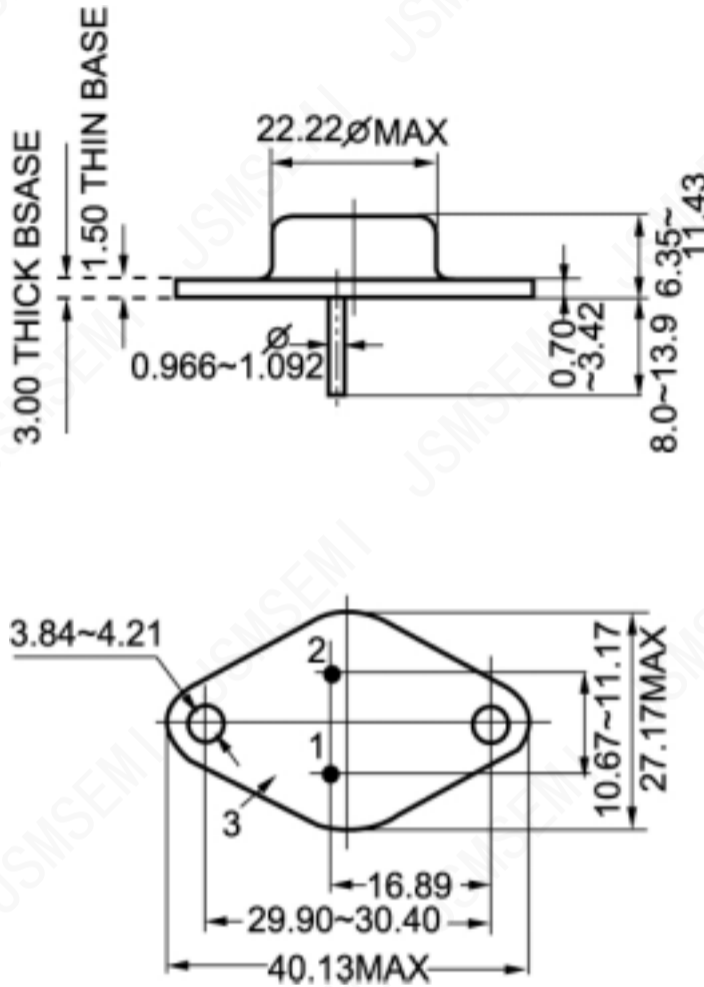


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)