

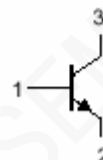
DESCRIPTION

- With TO-3 package
- Complement to type MJ15004G
- 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($T_a = ^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	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	$T_C = 25^\circ\text{C}$	250	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	0.7	$^\circ\text{C/W}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	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	$I_E=0; V_{CB}=10V; f=1.0MHz$			1000	pF
f_T	Transition frequency	$I_C=0.5A; V_{CE}=10V; f=0.5MHz$	2			MHz

PACKAGE OUTLINE

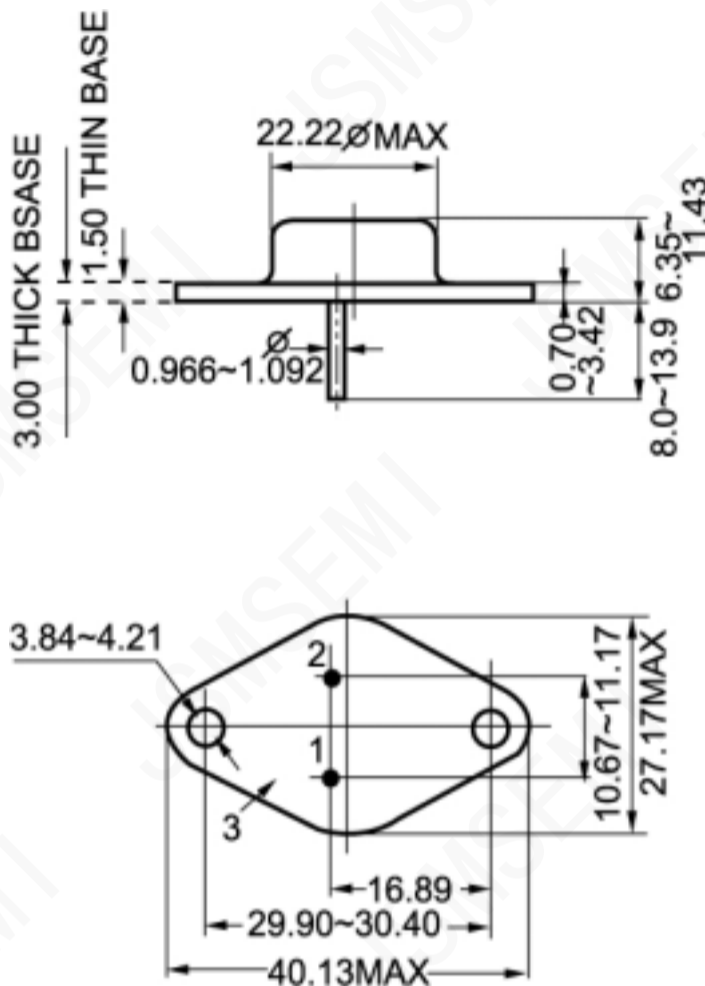


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)