PRODUCT DATA SHEET

To learn more about JGSEMI, please visit our website at

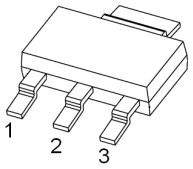
Datasheet Resources Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

PZTA64

SOT-223 Plastic-Encapsulate Transistors

SOT-223



1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

- Low Voltage and High Current
- High Current Gain Applications

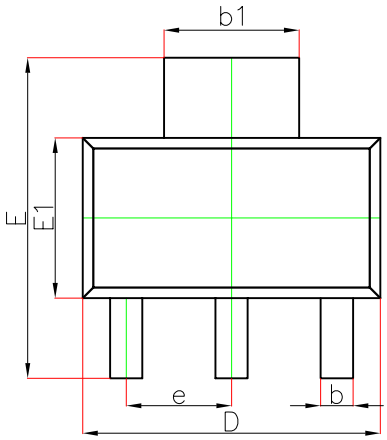
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

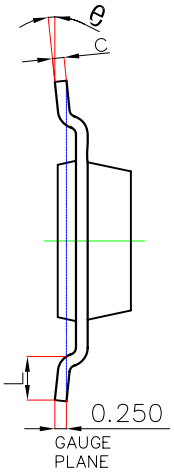
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-10	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

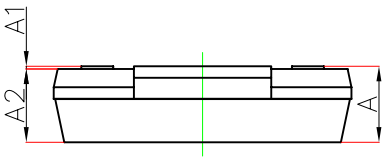
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	$V_{(BR)CES}$	I_C=-0.1mA,I_B=0	-30			V
Collector cut-off current	I_{CBO}	V_{CB}=-30V,I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-10V, I_C=0			-100	nA
DC current gain	$h_{FE(1)}$*	V_{CE}=-5V, I_C=-10mA	10000			
	$h_{FE(2)}$*	V_{CE}=-5V, I_C=-100mA	20000			
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=-100mA,I_B=-0.1mA			-1.5	V
Base-emitter voltage	V_{BE}*	V_{CE}=-5V, I_C=-100mA			-2	V
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA, f=100MHz	125			MHz

*Pulse test: pulse width ≤350μs, duty cycle≤ 2.0%.

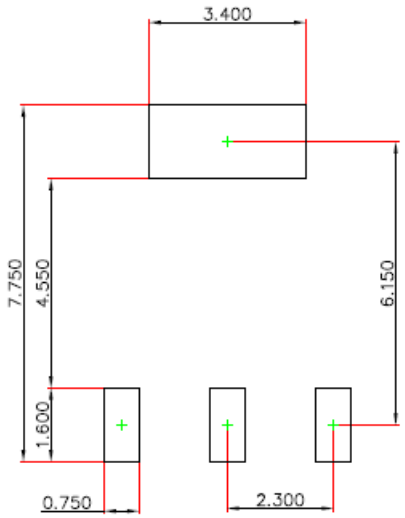






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	——	1.800	——	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	——	0.030	——
θ	0°	10°	0°	10°

SOT-223 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.050mm.
3.The pad layout is for reference purposes only.

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