



JSPG3150A

3A Schottky Barrier Rectifier

Rev.1.2

DESCRIPTION

- ✧ Plastic package has underwriters laboratories flammability classification 94V-0
- ✧ For surface mounted applications in order to optimize board space
- ✧ Lead free in compliance with EU RoHS 2011/65/EU directive
- ✧ Ultra low forward voltage drop
- ✧ Low power losses, high efficiency operation
- ✧ High current capability and surge capability
- ✧ Low thermal resistance package

MECHANICAL DATA

- ✧ Case: SMB molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end

ABSOLUTE MAXIMUM RATING (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	JSPG3150A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC blocking voltage	V_{DC}	150	V
Maximum average forward current	$I_{F(AV)}$	3.0	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Operating junction temperature range	T_j	-55 to +150	
Storage temperature range	T_{stg}	-55 to +150	

ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage $I_F=3A$	V_F			0.90	V
Reverse current at rated DC blocking voltage $T_A=25$	I_R			0.1	mA
Junction capacitance $V_R=4.0V, f=1MHz$	C_J		90		pF



THERMAL RESISTANCES

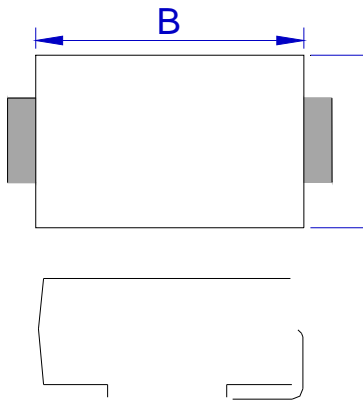
Symbol	Parameter	JSPG3150A	Unit
$R_{th(j-a)}$	Thermal resistance from junction to ambient (note1)	60	/W

Note1 Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B mounted

MARKING



PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Millimeters		Inches	
	Min.			
A				
B				
C				
D	0.95			
E				
F	0.051			
G	0.15			



TAPE AND REEL SPECIFICATION-SMB





CHARACTERISTICS CURVE

FIG.3: Maximum non-repetitive peak forward surge current

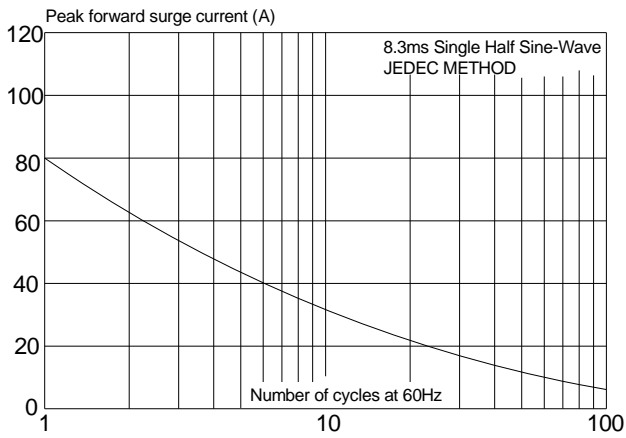


FIG.4: Forward current derating curve

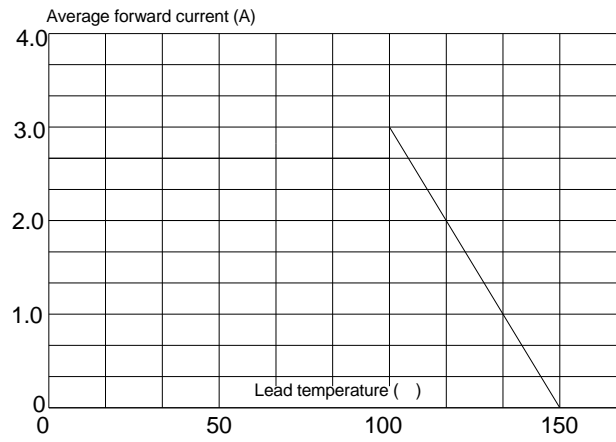


FIG.5: Maximum transient thermal impedance

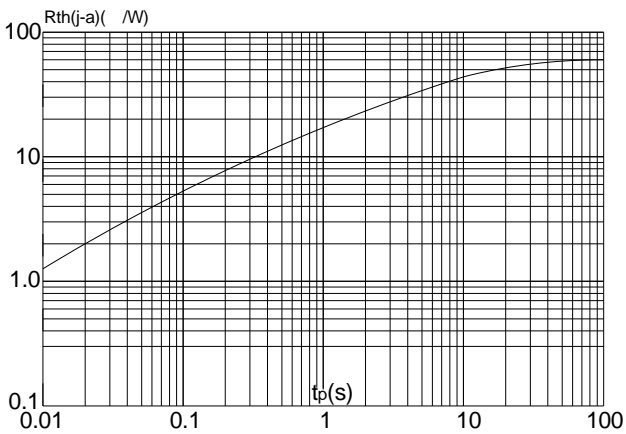
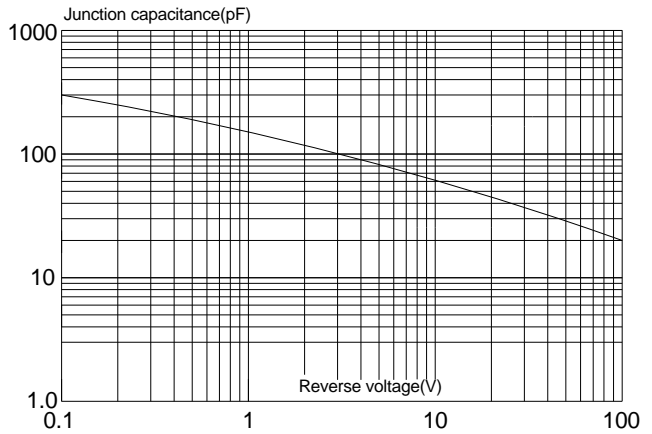


FIG.6: Typical junction capacitance



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co.,Ltd assumes