



JSPX1150A

1A 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: SMA molded p01htic
- ✧ Terminals: Solder p01ted, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end

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

Parameter	Symbol	JSPX1150A	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	$I_{F(AV)}$	1.0	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30	A
Operating junction temperature range	T_j	-55 to +150	
Storage temperature range	T_{stg}	-55 to +150	

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

Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1A$ V_F			0.9	V
Reverse current at rated DC blocking voltage	$T_A=25$ I_R			0.1	mA
	$T_A=100$			5	
Junction capacitance	V_R				



THERMAL RESISTANCES

Symbol	Parameter	JSPX1150A	Unit
$R_{th(j-a)}$	Thermal resistance from junction to ambient	85	/W





CHARACTERISTICS CURVE

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

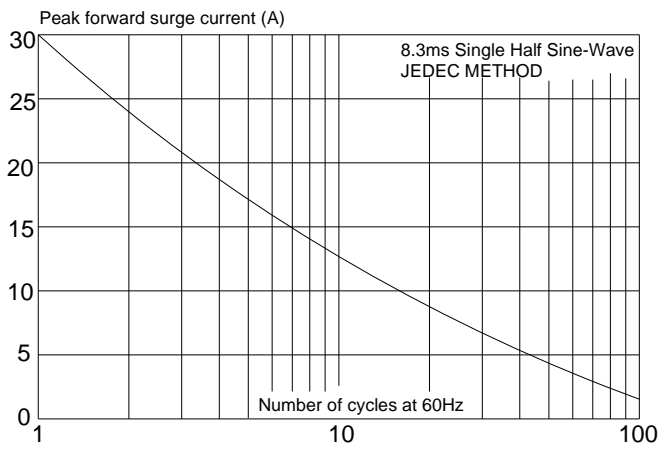


FIG.4: Forward current derating curve

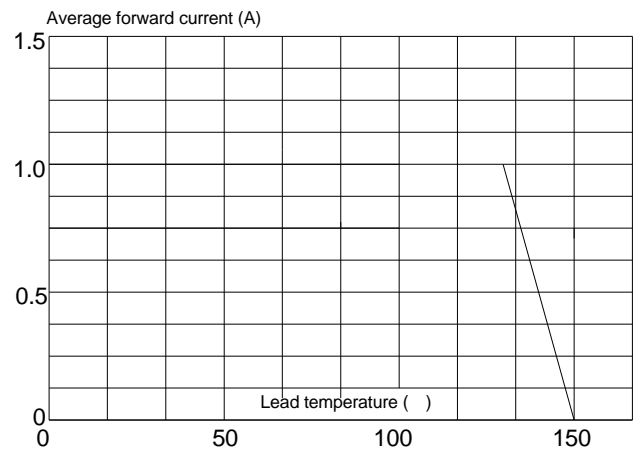


FIG.5: Maximum transient thermal impedance

FIG.6: Typical junction capacitance