JSPX160A

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	JSPX160A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	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	

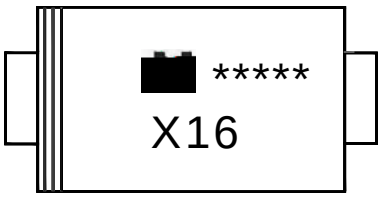
ELECTRICAL CHARACTERISTICS (Rating at 25 ambient temperature unless otherwise specified.)

Parameter		Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=1A	V_F			0.7	V
Reverse current at rated DC blocking voltage	T_A=25	I_R			0.5	mA
	T_A=100				6	
Junction capacitance	V_R					

THERMAL RESISTANCES

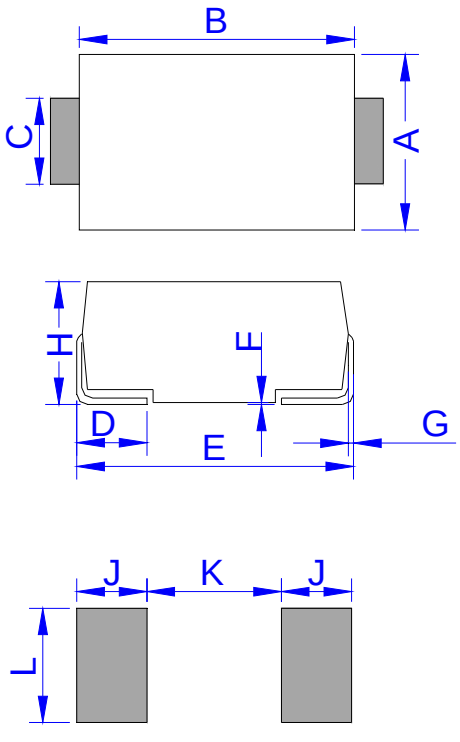
Symbol	Parameter	JSPX160A	Unit
$R_{th(j-a)}$	Thermal resistances from junction to ambient	85	/W

MARKING



The first '*'	Date code
The second '*'	
The third '*'	Batch code
The fourth '*'	
The fifth '*'	
X	Package: SMA
1	$I_{F(AV)}$:1A
6	V_{RRM}:60V

PACKAGE MECHANICAL DATA



DO-214AC (SMA)

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.60	3.00	0.102	0.118
B	4.15	4.65	0.163	0.183
C	1.25	1.65	0.049	0.065
D	0.95	1.52	0.037	0.060
E	4.90	5.30	0.193	0.209
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	2.00	2.44	0.079	0.096
J	2.00		0.079	
K		2.30		0.091
L	1.80		0.071	

CHARACTERITICS CURVE

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

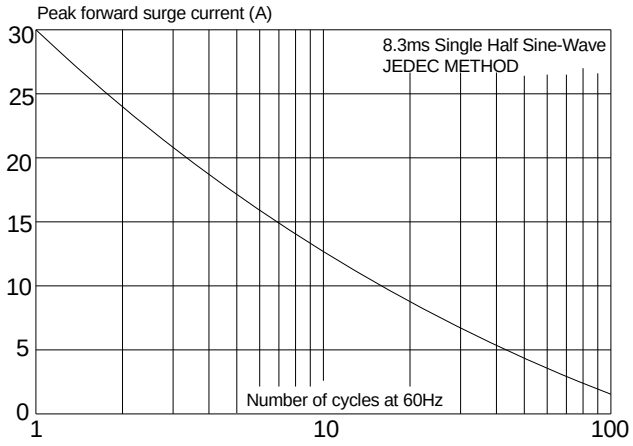


FIG.4: Forward current derating curve