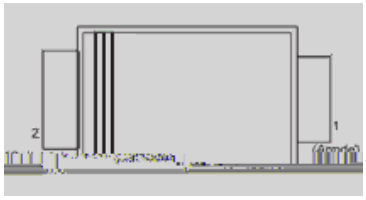
JSPG3100A

3A Schottky Barrier Rectifier

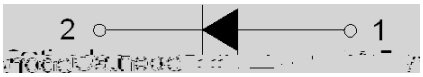
Rev.1.2

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



DO-214AA (SMB)



Symbol

MECHANICAL DATA

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

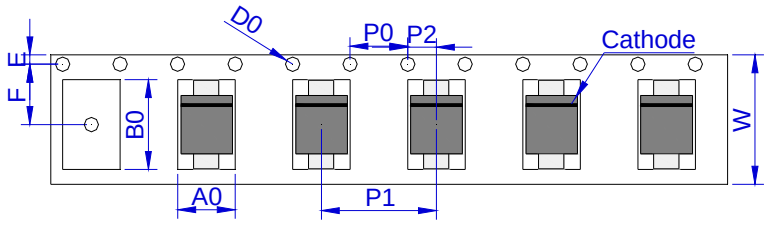
ABSOLUTE MAXIMUM RATING(Rating at 25℃ ambient temperature unless otherwise specified.)

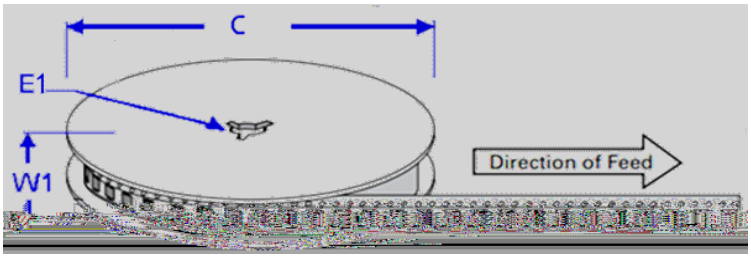
Parameter	Symbol	JSPG3100A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward current	$I_{F(AV)}$	3.0	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Operating junction temperature range	T_j	-55 to +150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

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

Parameter		Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=3A	V_F			0.85	V
Reverse current at rated DC blocking voltage	T_A=25℃	I_R			0.1	mA
	T_A=100℃				8	
Junction capacitance	V_R=4.0V, f=1MHz	C_J		90		pF

TAPE AND REEL SPECIFICATION-SMB





OUTLINE

UNIT WEIGHT
(g/PCS) typ. (g06n -36.36 re1.70858552.86 mh2.0832 546.22.8129.52 -24 re145.8 546.68 mV

CHARACTERITICS CURVE

FIG.1: Typical forward characteristics (25℃)

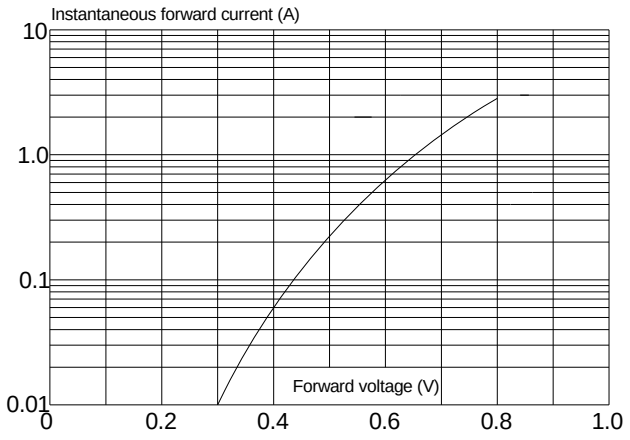
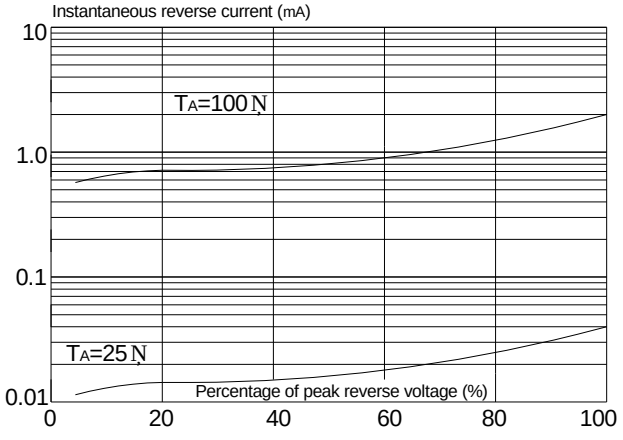


FIG.2: Typical reverse characteristics



CHARACTERITICS CURVE

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

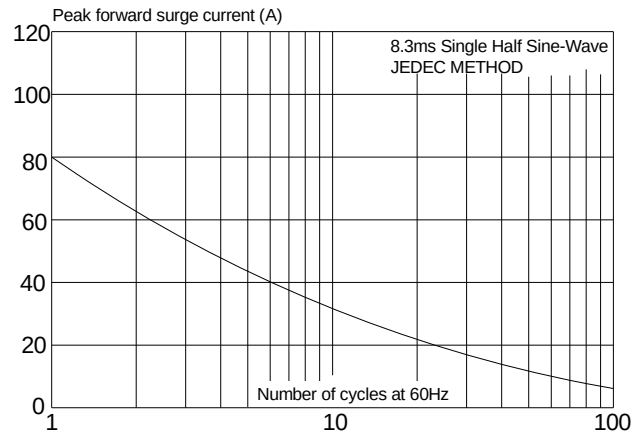


FIG.4: Forward current derating curve

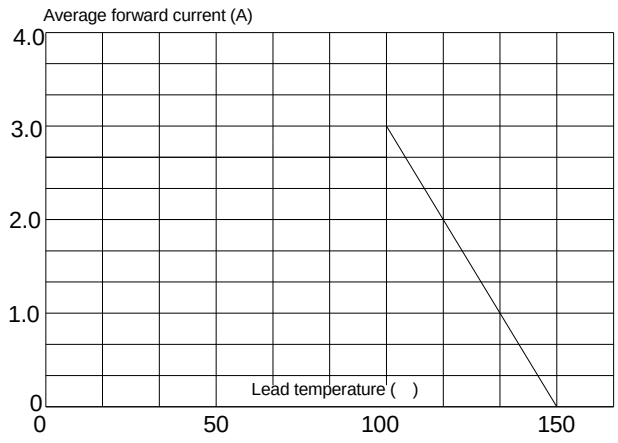


FIG.5: Maximum transient thermal impedance

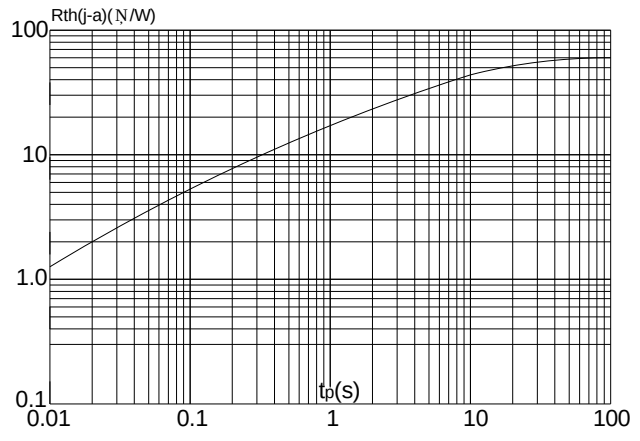


FIG.6: Typical junction capacitance