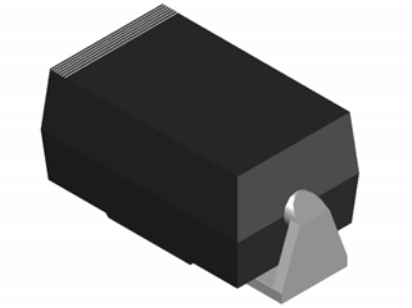
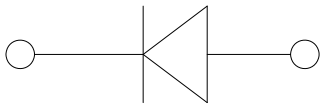
Plastic High Voltage Rectifier





Features

- VR 2KV
- IO 0.5A
- Glass passivated chip junction
- High surge current capability

Mechanical Data

- **Package**: SMA-W
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■Maximum Ratings (Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	EM520AG
Device marking code			EM520AG
Maximum Repetitive peak reverse voltage	V_{RRM}	V	2000
Maximum RMS Voltage	V_{RMS}	V	1400
Maximum DC Blocking Voltage	V_{DC}	V	2000
Average rectified output current @ 60Hz sine wave, Resistance load, Ta=50℃ (FIG.1)	I_O	A	0.5
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	20
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			40
Current squared time @1ms≤t≤8.3ms Tj=25℃	I^2t	A^2s	1.66
Storage temperature	Tstg	℃	-55 ~ +150
Junction temperature	Tj	℃	-55 ~ +150

■Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	EM520AG
Maximum instantaneous forward voltage	V_F	V	I_{FM}=0.5A	2
Maximum DC reverse current at rated DC blocking voltage	I_R	μA	Tj =25℃	5
			Tj =125℃	50
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	4.5

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
EM520AG	F1	Approximate 0.067	5000	/	80000	Reel

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	EM520AG
Typical Thermal Resistance	$R_{\theta J-A}$	℃/W	65[1)]

Note
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ Characteristics (Typical)

FIG.1: Io-Ta Curve

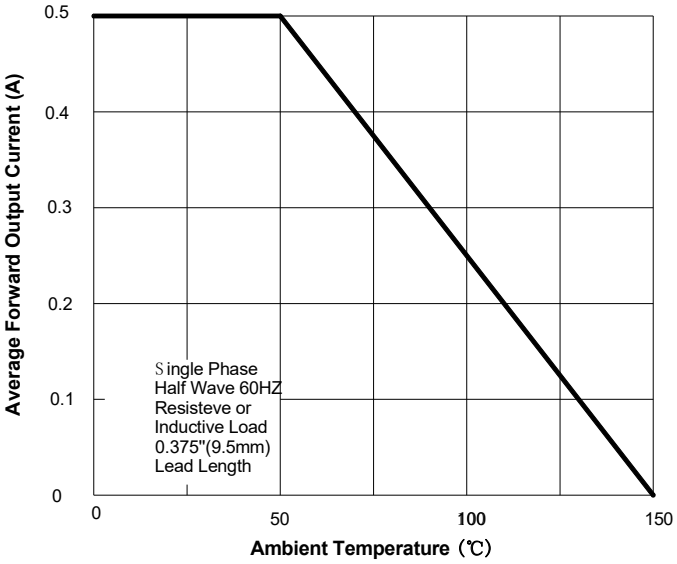


FIG.2: Forward Surge Current Capability

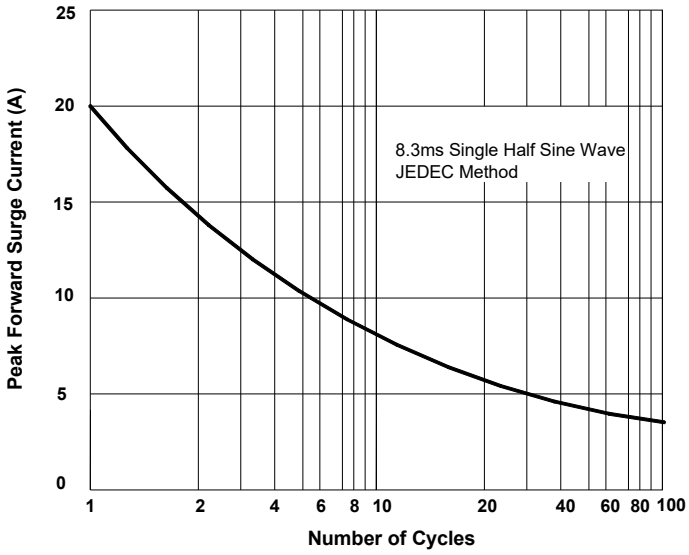


FIG.3: Forward Voltage

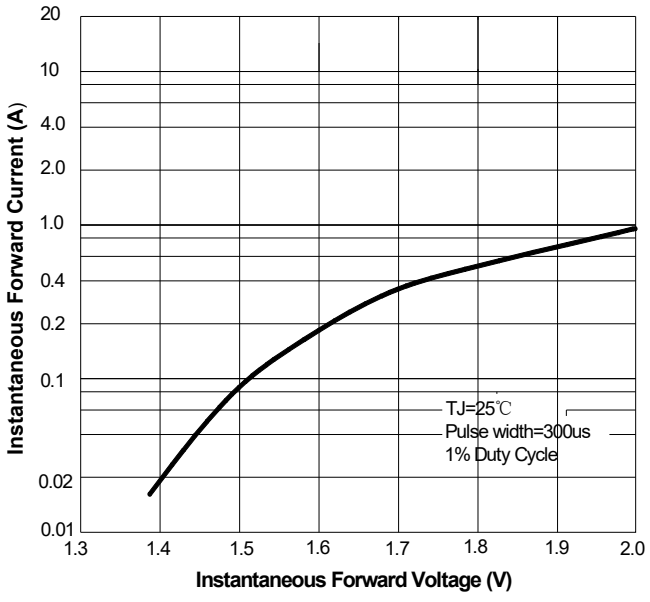
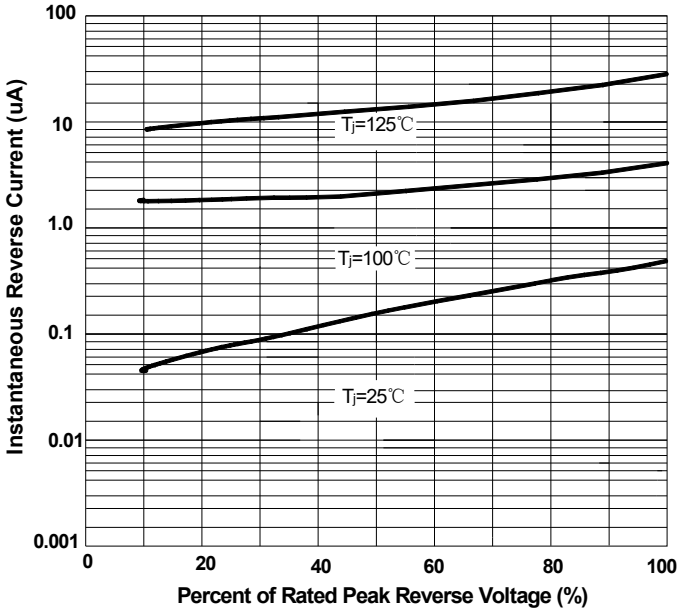
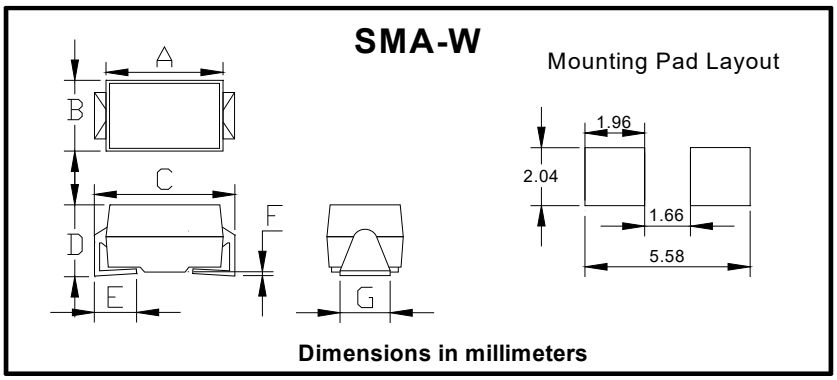


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions



SMA-W		
Dim	Min	Max
A	4.00	4.60
B	2.40	2.65
C	4.80	5.31
D	2.05	2.45
E	0.80	1.50
F	0.10	0.20
G	1.15	1.80

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