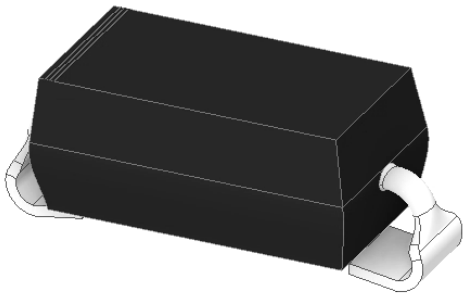
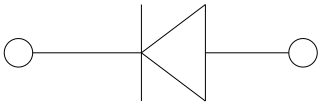
Plastic High Voltage Rectifier





Features

- VR 4KV
- IO 1.0A
- Glass passivated chip junction
- High surge current capability

Mechanical Data

- **Package**: SMB-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	EM540BGL
Device marking code			EM540BGL
Maximum Repetitive peak reverse voltage	V_{RRM}	V	4000
Maximum RMS Voltage	V_{RMS}	V	2800
Maximum DC Blocking Voltage	V_{DC}	V	4000
Average rectified output current @ 60Hz sine wave, Resistance load	I_O	A	1.0
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	EM540BGL
Maximum instantaneous forward voltage	V_F	V	I_{FM}=1.0A	2.4
Maximum DC reverse current at rated DC blocking voltage	I_R	μA	Tj =25℃	5
			Tj =125℃	100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	2.5

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
EM540BGL	F1	Approximate 0.067	3000	/	48000	Reel

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

PARAMETER	SYMBOL	UNIT	EM540BGL
Typical Thermal Resistance	$R_{\theta J-A}$	℃/W	90

■ Characteristics (Typical)

FIG.1: Io-Ta Curve

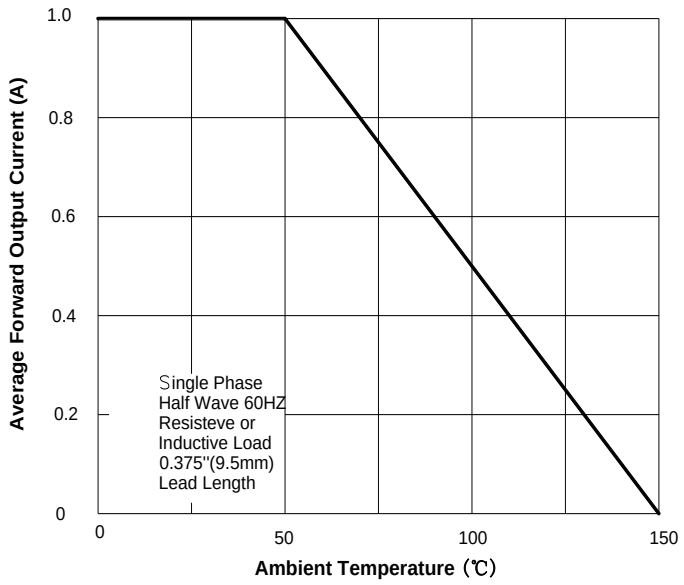


FIG.2: Forward Surge Current Capability

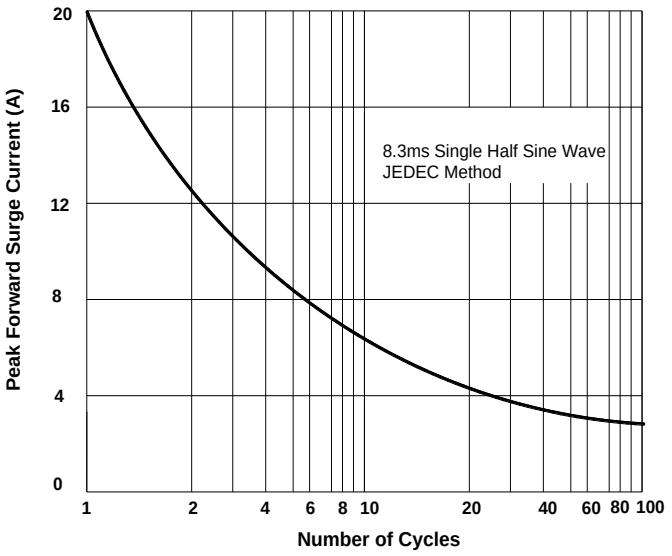


FIG.3: Forward Voltage

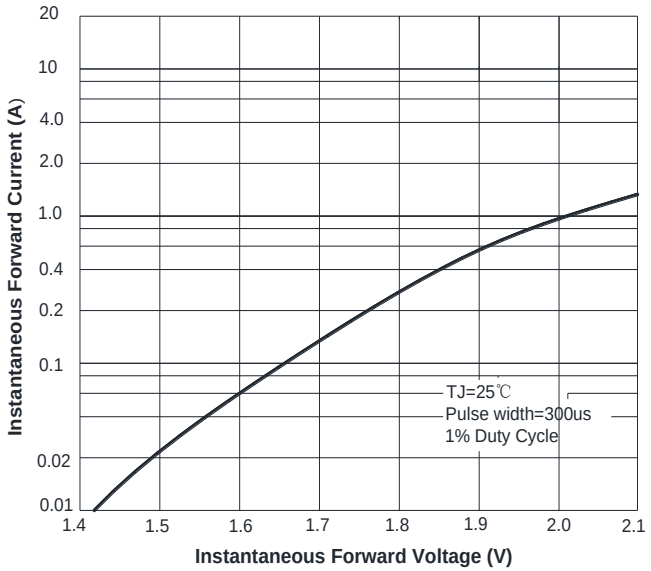
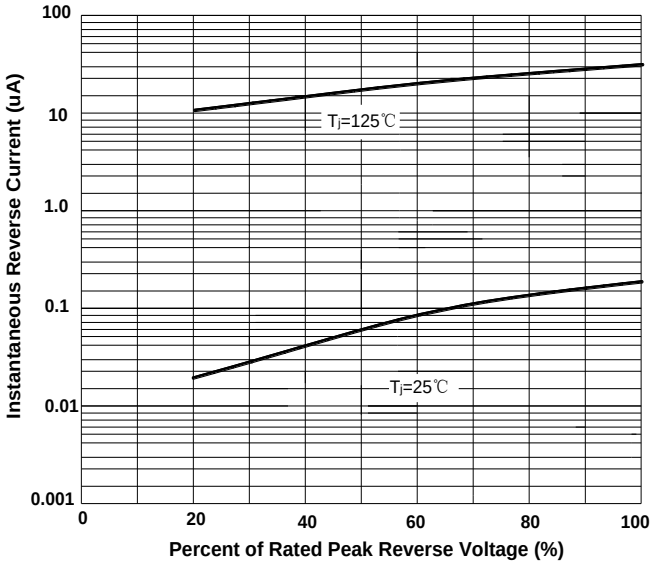
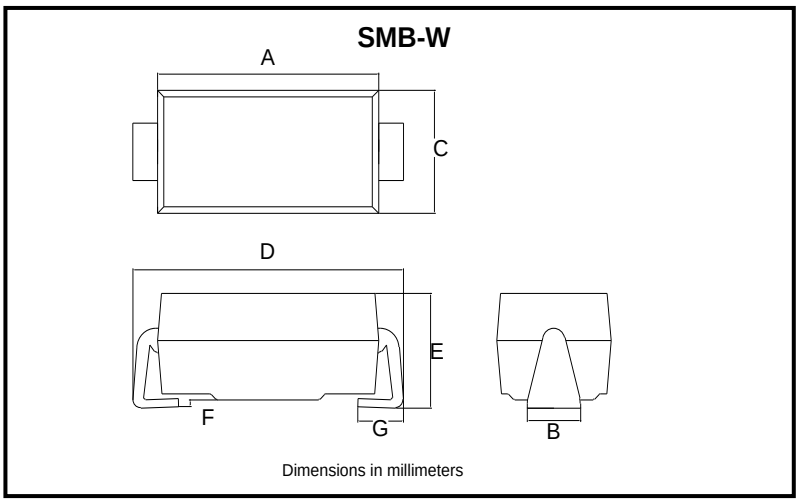


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions



SMB-W		
Dim	Min	Max
A	5.6	6.0
B	1.1	1.7
C	2.85	3.15
D	6.85	7.35
E	2.55	2.95
F	0.2TYP	
G	0.9	1.5

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