

Feature

- High Surge Current Capability
- Glass passivated chip junction
- Reverse Voltage-100 to 1000V
- Average Rectified Output Current-1A
- Design for Surface Mount Application

Mechanical Characteristics

- Case: UMB
- Terminals: Solderable per MIL-STD-750, Method 2026

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Parameter	Symbol	UM1B-10	UM2B-10	UM4B-10	UM6B-10	UM8B-10	UM10B-10	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking	V _{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at T _C =115°C	I _O	1						A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I _{FSM}	35						A
Maximum Forward Voltage at 1.0A	V _F	1.1						V
Maximum DC Reverse Current @T _a =25°C at Rated DC Blocking Voltage @T _a =125°C	I _R	5 40						uA
Typical Junction Capacitance (Note1)	C _J	13						pF
Typical Thermal Resistance (Note2)	R _{θJA} R _{θJA}	85 25						°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55~+150						°C

Notes:

1. Measure at 1MHz and applied reverse voltage of 4 V D.C.
2. P.C.B. mounted with 4X1.5”X1.5” (3.81x3.81 cm) copper pad areas.

Typical Characteristics

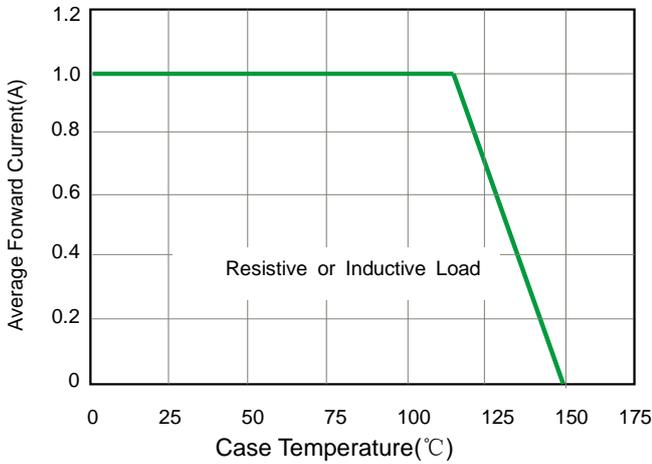


Fig.1 Average Rectified Output Current Derating Curve

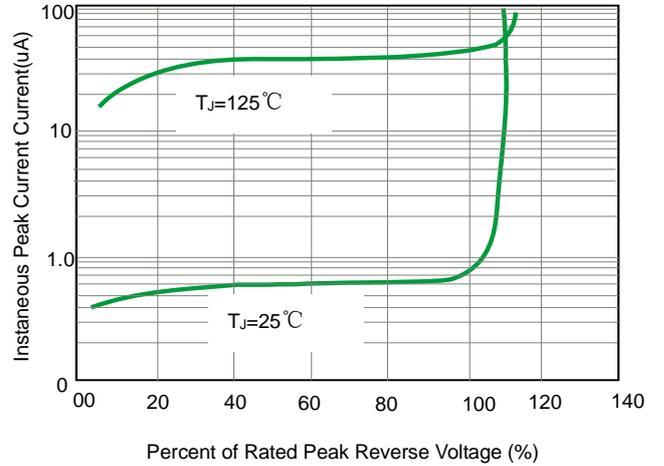


Fig.2 Typical Reverse Characteristics

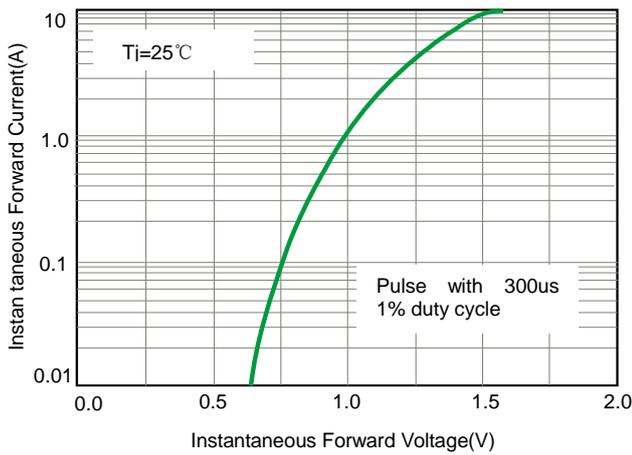


Fig.3. Typical Instantaneous Forward Characteristics

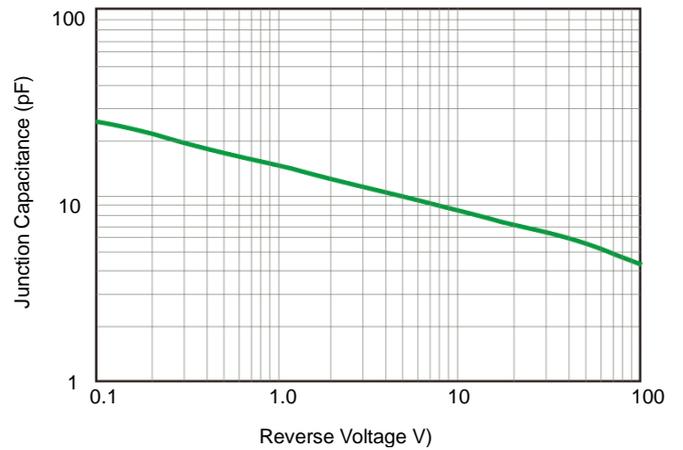


Fig.4. Typical Junction Capacitance

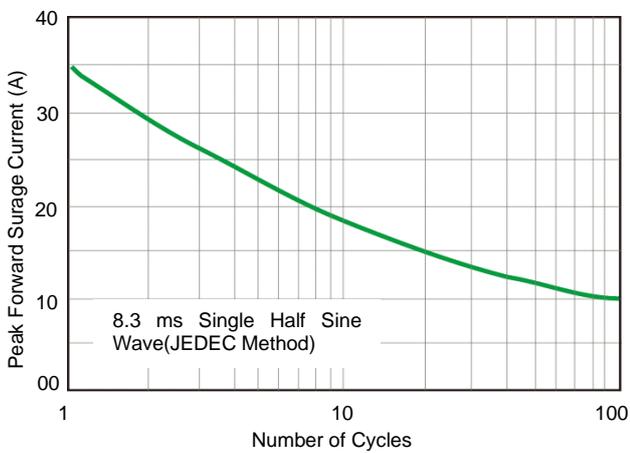
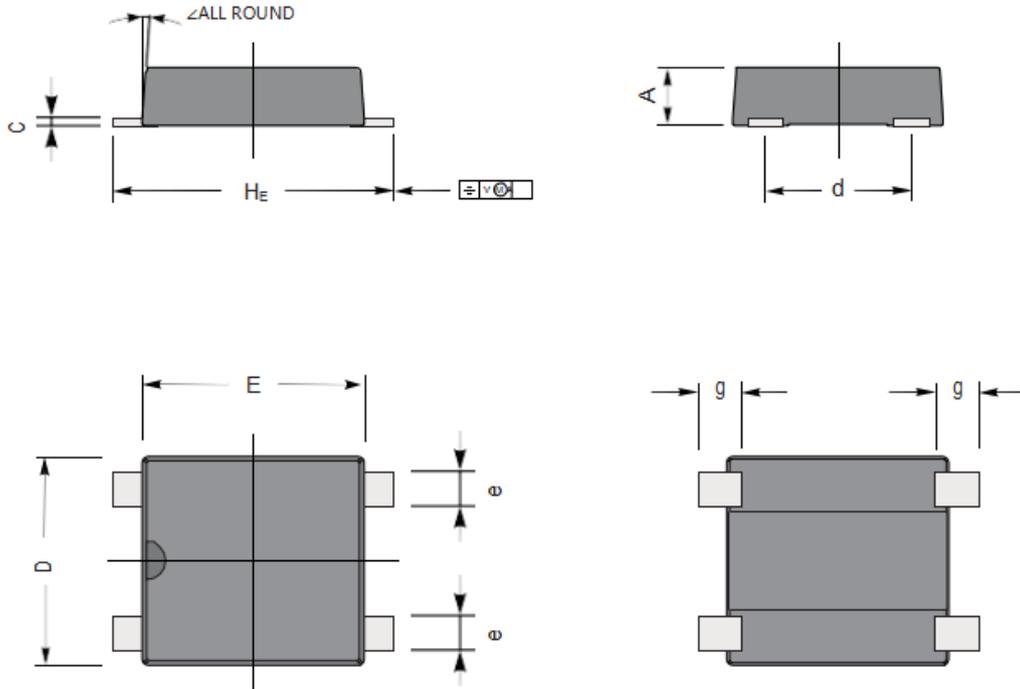


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

Product dimension (UMB)



UMB mechanical data

UNIT		A	C	D	E	H _E	g	d	e	\angle
mm	max	1.2	0.20	3.8	4.0	5.1	0.82	2.7	0.70	7°
	min	1.0	0.12	3.4	3.6	4.6	0.51	2.3	0.51	
mil	max	47	7.9	150	157	201	32	106	28	
	min	39	4.7	134	142	181	20	91	20	

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