

UM05B THRU UM10B

0.5 AMP SURFACE MOUNT BRIDGE RECTIFIERS

FEATURES:

Glass Passivated Chip Junction
 Reverse Voltage - 100 to 1000 V
 Average Rectified Output Current- 0.8 A
 High Surge Current Capability
 Designed for Surface Mount Application

MECHANICAL DATA

- Case: UMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 45mg 0.0016oz

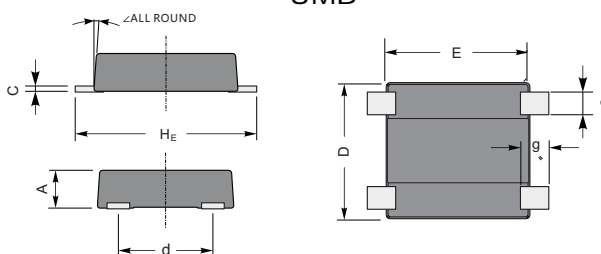
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

0.5 Ampere

UMB



UNIT		A	C	D	E	H _E	g	d	e	∠
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	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

TYPE NUMBER	UM05B	UM1B	UM2B	UM4B	UM6B	UM8B	UM10B	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)	0.5							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	2.5							A
Maximum Forward Voltage Drop per Bridge Element at 0.25A D.C.	1.1							V
Maximum DC Reverse Current Ta=25°C	3.0							µA
at Rated DC Blocking Voltage Ta=125°C	100							µA
Typical Thermal Resistance R _{JA} (Note 2)	110							°C/W
Operating Temperature Range, T _J	-55 — +150							°C
Storage Temperature Range, T _{STG}	-55 — +150							°C

NOTES: 1. Mounted on P.C. Board.
 2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (UM05B THRU UM10B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

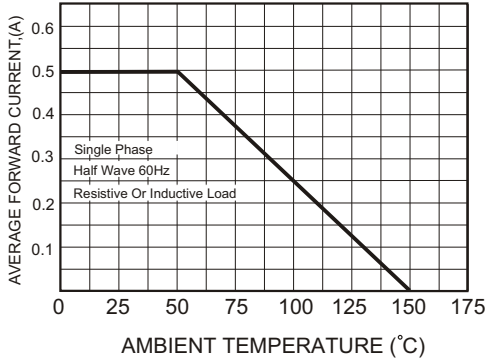


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

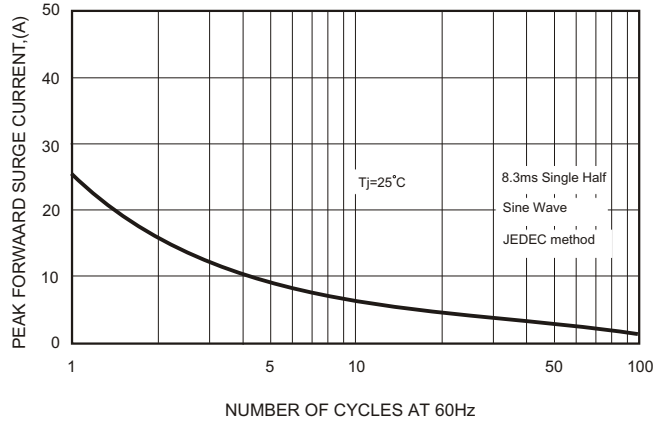


FIG.3-TYPICAL FORWARD CHARACTERISTICS

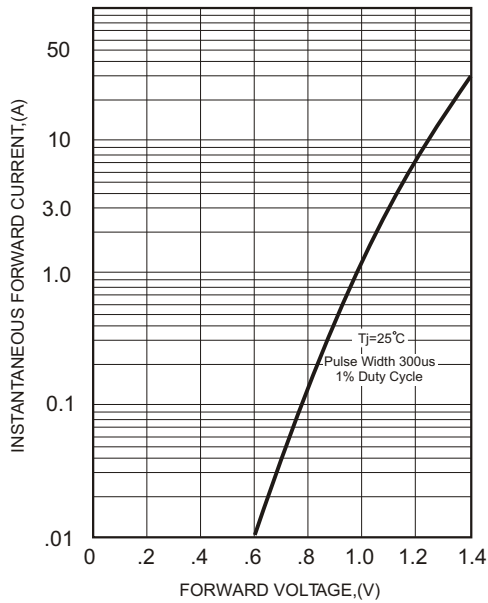


FIG.4-TYPICAL REVERSE CHARACTERISTICS

