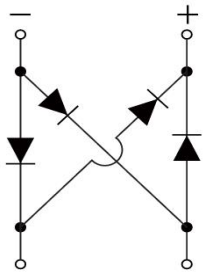
1.0A Single-Phase Glass Passivated Bridge Rectifiers

1 General Description

1.1 Features

- Ideal for printed circuit board mounting
- Surge overload ratings to 30 amperes
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 250℃/10 seconds at terminals

REVERSE VOLTAGE
50-1000V
FORWARD CURRENT
1Ampere



1.2 Typical Applications

- General-purpose bridge rectifiers, Rectification for SMPS, PD fast chargers, small household appliance control boards, and other bridge rectification applications.

1.3 Mechanical Data

- Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Polarity: Marked on body

2 Maximum Ratings(TA=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_L=30℃ On glass-epoxy P.C.B (Note 1) On aluminum substrate (Note 2)	$I_{F(AV)}$	0.8 1.0							A
Peak Forward Surge Current Single Sine-Wave Superimposed On Rated Load (JEDEC Method)	I_{FSM}	30.0							A
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃
Typical Thermal Resistance	$R_{\theta JA}$	65.0							℃/W

Notes:1.Mounted on glass epoxy PC board with 1.3*1.3mm solder pad
2.Mounted on aluninum substrate PC board with 1.3*1.3mm solder pad
3.Measured at 1MHz and applied reverse voltage of 4.0V D.C

3 Electrical Characteristics(TA=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	UNIT
Maximum instantaneous Forward Voltage drop per leg at 0.8A		V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5.0							μA
	T_A=125℃		500							
Typical junction capacitance (Note 3)		C_j	13.0							ns

4 Characteristics Curves(TA=25℃ Unless otherwise specified)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

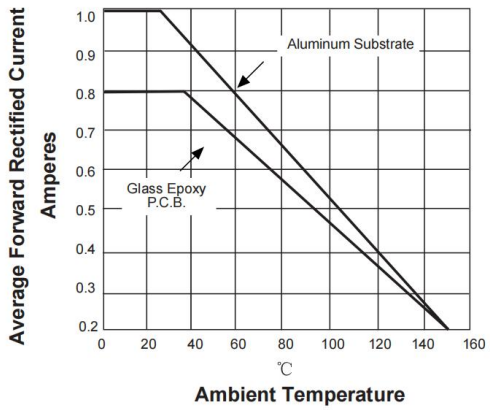


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

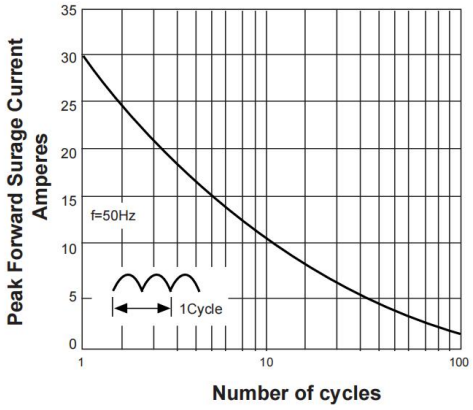


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

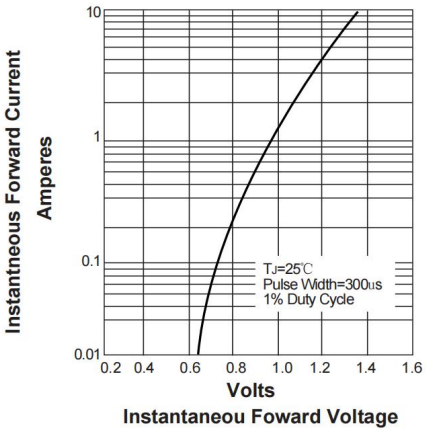


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

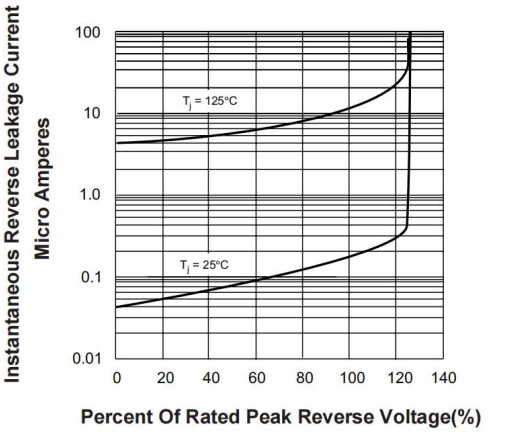
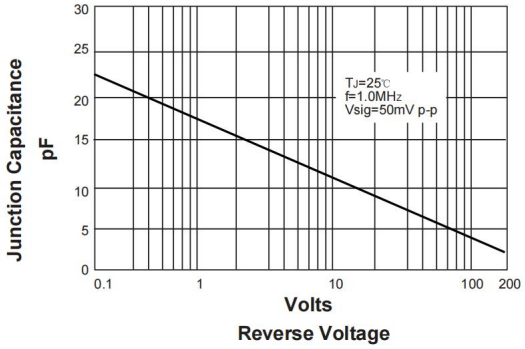
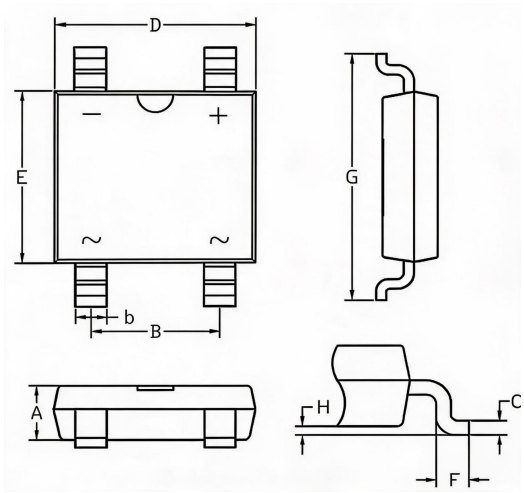


FIG. 5-TYPICAL JUNCTION CAPACTITANE



5 Package Outline Dimensions



Symbol	UNIT(mm)	
	Min	Max
A	1.22	1.42
B	3.80	4.40
b	0.55	0.85
C	0.15	0.25
D	4.90	5.40
E	4.30	4.50
F	0.2	1.5
G	6.20	6.80
H	0.05	0.15

6 Ordering Information

PACKAGE	UNIT WEIGHT (g)	REEL (pcs)	BOX (pcs)	CARTON (pcs)
ABS	Approximate 0.16	5000	10000	50000

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