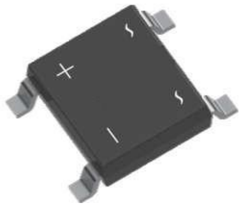
1A Fast Recovery Bridge Rectifier

Features

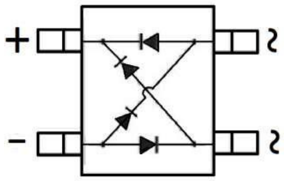
- Glass Passivated Chip Junction
- Reverse Voltage : 50 to 1000V
- Forward Current : 1A
- High Surge Current Capability
- High temperature soldering : 260°C/10s at terminals



ABS

Applications

- High-frequency switching power supply
- PFC circuit



Maximum Ratings and Electrical characteristics

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

Parameter		Symbol	RABS05	RABS1	RABS2	RABS4	RABS6	RABS8	RABS10	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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_C=125℃		$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1.0A		V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	10							μA
	T_A=125℃		100							
Maximum Reverse Recovery Time T=25℃(Note 3)		T_{RR}	150				250	500		nS
Typical Junction Capacitance(Note 1)		C_J	15							pF
Typical Thermal Resistance(Note 2)		$R_{θJA}$	80							°C/ W
Operating Junction Temperature Range		T_J, T_{STG}	(-55 to+150)							°C

Notes:
1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2.Reverse Recovery Test Conditions:If=0.5mA,Ir=1.0mA,Irr=0.25A

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

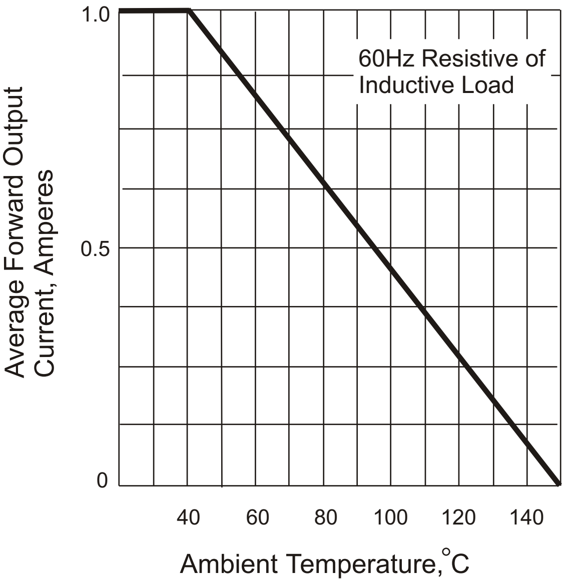


Fig. 3 Typical Instantaneous Forward Characteristics

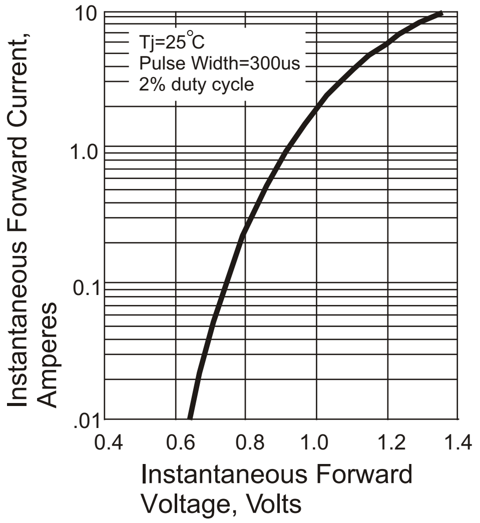


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

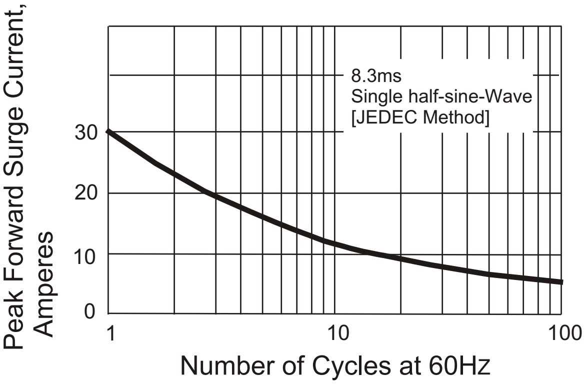


Fig. 4 Typical Revers Characteristics

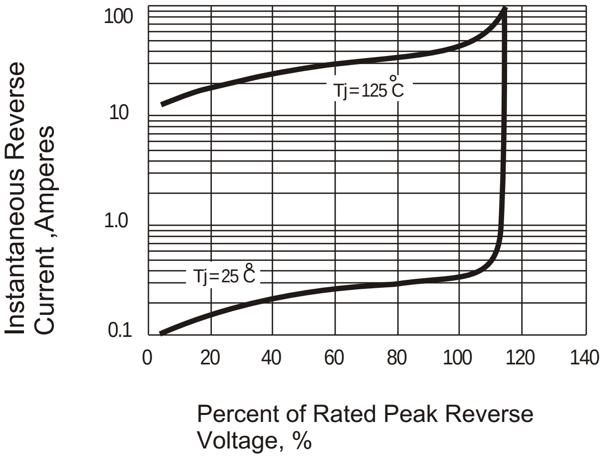
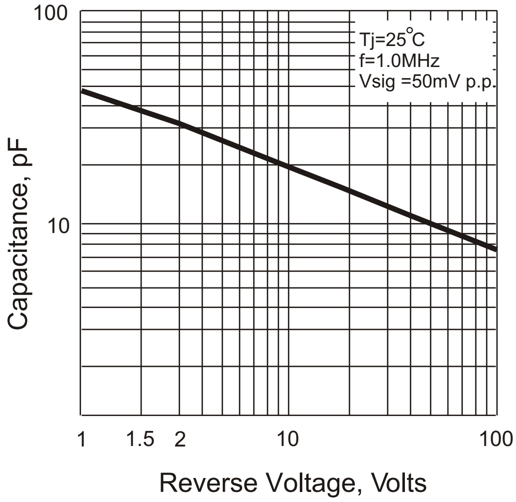
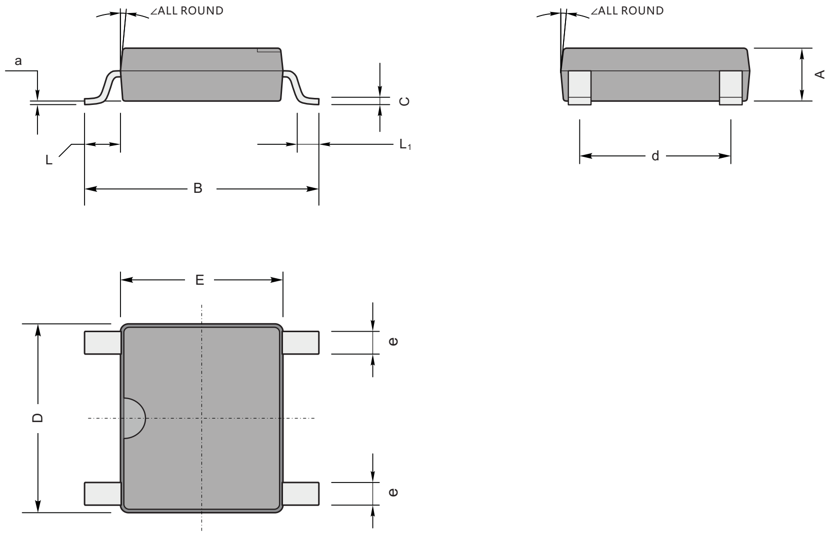


Fig. 5 Typical Junction Capacitance



Package Outlines (Dimensions in mm)

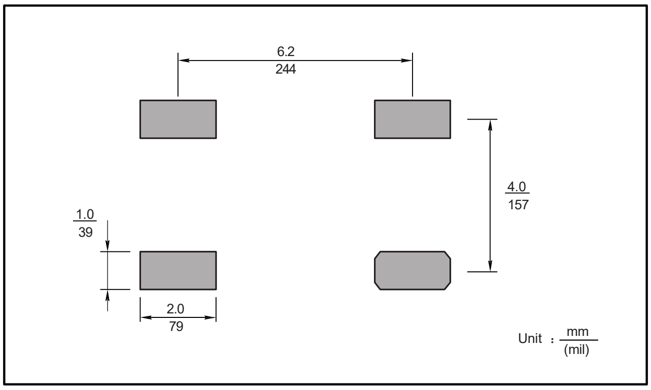
Plastic surface mounted package(ABS)



ABS mechanical data

UNIT		A	C	D	E	B	d	e	L	L1	a	∠
mm	max	1.5	0.22	5.3	4.6	6.5	4.2	0.7	0.95	0.6	0.2	5°
	min	1.3	0.15	5.0	4.3	6.1	3.8	0.5				
mil	max	59	8.7	209	181	256	165	28	37	24	8	
	min	51	5.9	197	169	240	150	20				

The recommended mounting pad size



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