

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Low forward voltage drop, High current capability
- Soft recovery improves EMC performance
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

MECHANICAL DATA

- Case: ABS molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any

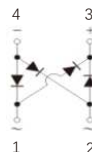
TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.

ABS



Pin Diagram



Internal Schematic

Marking:

JF: Logo

xxxx: Date code

RABS306L: Type

+ -: Polarity

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameters		Symbols	RABS306L	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	600	Volts
Maximum RMS Voltage		V_{RMS}	420	Volts
Maximum DC Blocking Voltage		V_{DC}	600	Volts
Maximum Average Forward Rectified Current		$I_{(AV)}$	3.0	Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	100	Amps
Rating for fusing (t=8.3ms)		I^2t	41.5	A ² S
Maximum DC Reverse Current at rated DC blocking voltage	$T_J=25^{\circ}C$	I_R	5.0	μA
	$T_J=125^{\circ}C$		200	
Maximum Instantaneous Forward Voltage at 3.0A		V_F	1.1	Volts
Typical thermal resistance (Note 2)		$R_{\theta JA}$	62.5	$^{\circ}C/W$
		$R_{\theta JC}$	25	
Maximum reverse recovery time (Note 1)		t_{rr}	500	ns
Operating junction and storage temperature range		T_J, T_{STG}	-55 to +150	$^{\circ}C$

Note: 1. Test conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.

2. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.56"×0.73" copper pad.

AVAILABLE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Quantity (reel/box)	Quantity (box/carton)	Quantity (K/carton)
RABS306L-ABS	T/R	Φ330	3000	2	8	48

FIG.1- FORWARD CURRENT DERATING CURVE

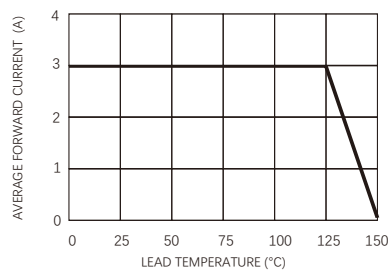


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

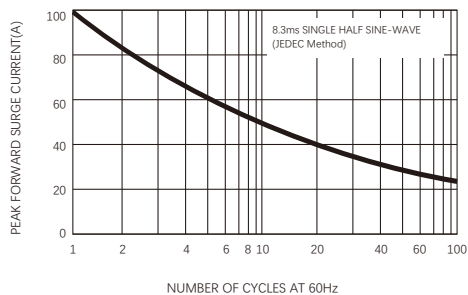


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

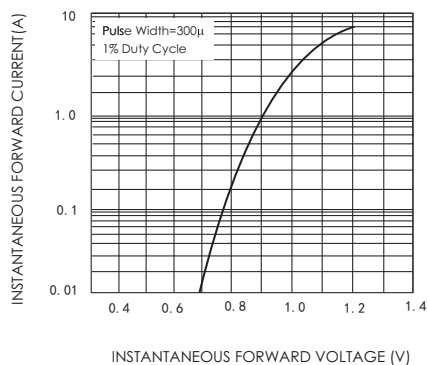
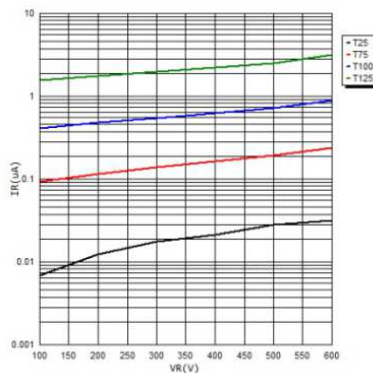
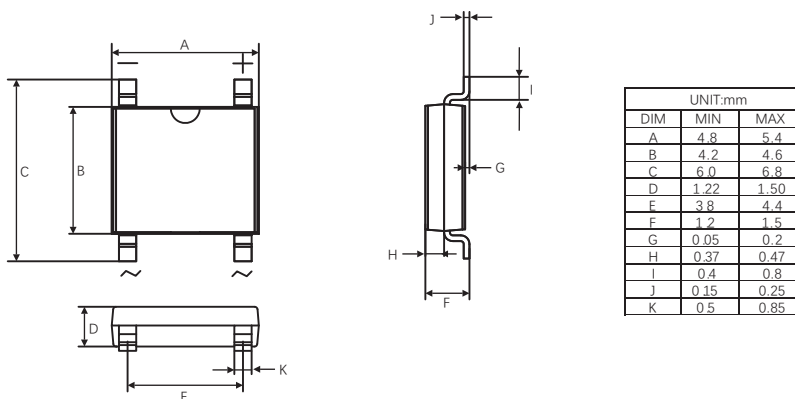


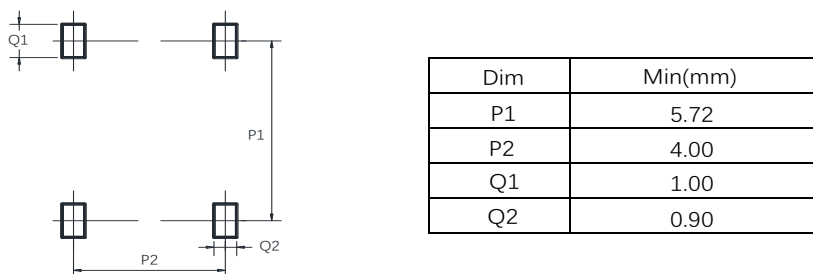
FIG.4- TYPICAL REVERSE CHARACTERISTICS



ABS



Suggested Pad Layout



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