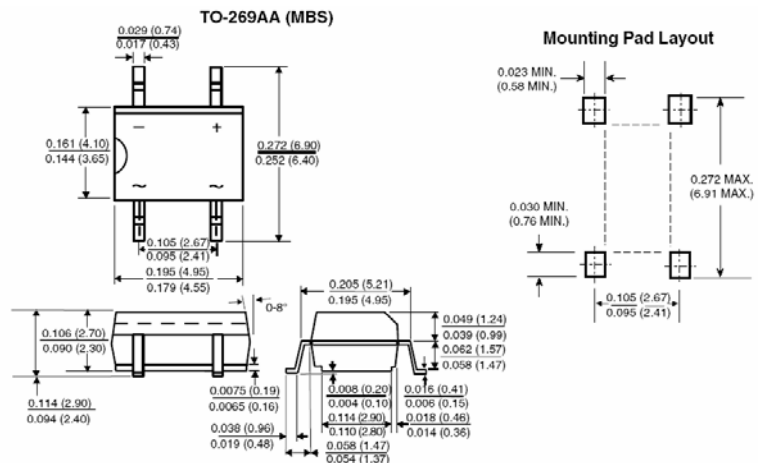


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High surge overload rating:30A peak
- Saves space on printed circuit boards
- High temperature soldering guaranteed:260 /10 seconds


Mechanical Data

- Case:Molded plastic body over passivated junctions
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Mounting Position:Any
- Weight:0.078 oz.,0.22g


Maximum Ratings & Electrical Characteristics

($T_A=25$ unless otherwise noted)

Parameter	Symbol	MB12S	MB14S	MB16S	MB18S	MB110S	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	V	
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	V	
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	V	
Maximum Average forward output current	$I_{F(AV)}$	1.0					A	
Peak forward surge current 8.3 MS single HALF sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A	
Maximum instantaneous forward voltage at 1.0A	VF	0.50		0.70	0.85		V	
Maximum DC reverse current at $T_A=25$ rated DC blocking voltage per leg $T_A=100$	IR	0.5					20	mA
Typical thermal resistance per leg(Note1)	$R_{\theta JA}$	88					/W	
	$R_{\theta JL}$	28						
Operation junction temperzture range	T_J	-55 to +150						
Storage temperature range	T_{STG}	-55 to +150						

Notes: 1. Thermal resistance form junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas.



Ratings and Characteristics Curves

(TA = 25 unless otherwise noted)

Fig.1 Forward Current Derating Curve

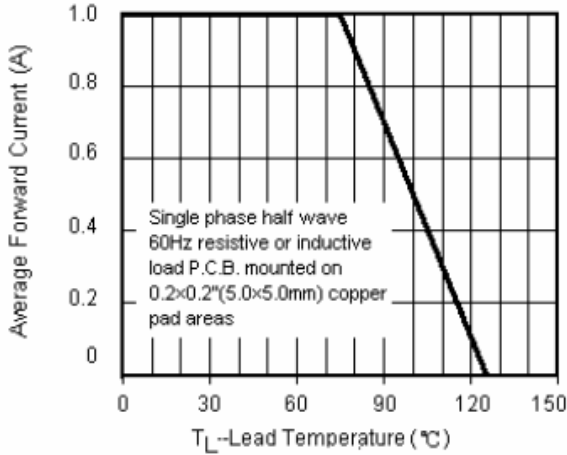


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

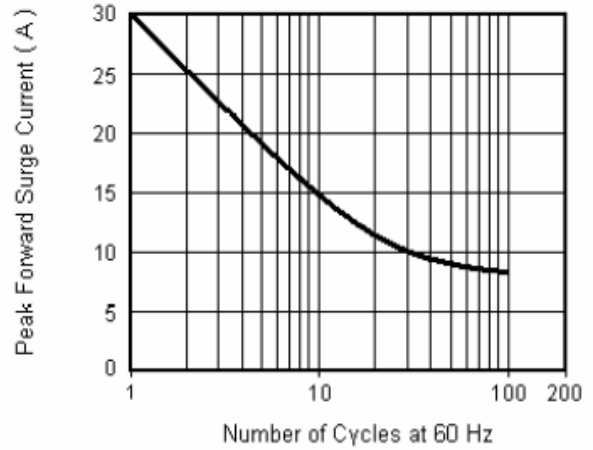


Fig.3 Typical Instantaneous Forward Characteristics

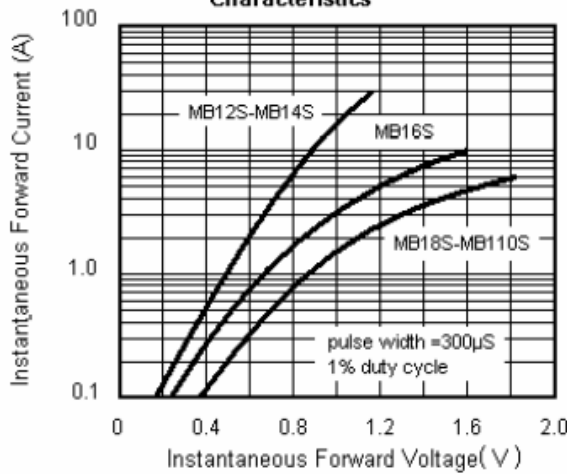
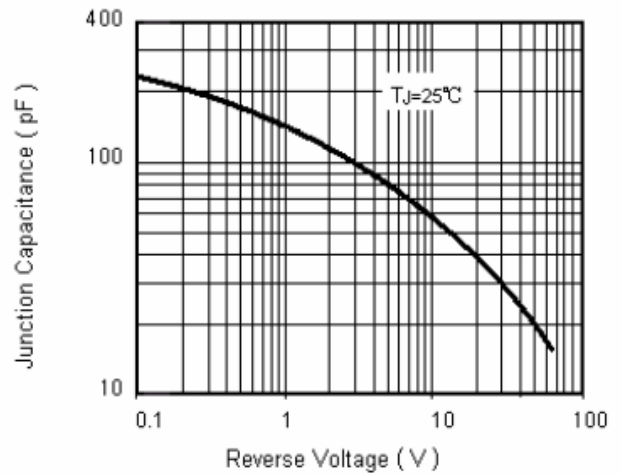


Fig.4 Typical Junction Capacitance



Notice

MOSPEC reserves the rights to make changes of the content herein the document anytime without notification. MOSPEC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Please refer to MOSPEC website for the last document.

MOSPEC disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially incurred.

Application shown on the herein document are examples of standard use and operation. Customers are responsible for comprehending suitable use in particular applications. MOSPEC makes no representation or warranty that such application will be suitable for the specified use without further testing or modification.

The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by MOSPEC for any infringements of patents or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of MOSPEC or others.

These MOSPEC products are intended for usage in general electronic equipment. Please make sure to consult with MOSPEC before you use these MOSPEC products in equipment which require specialized quality and/or reliability, and in equipment which could have major impact to the welfare of human life (atomic energy control, aeronautics , traffic control, combustion control, safety devices etc.)