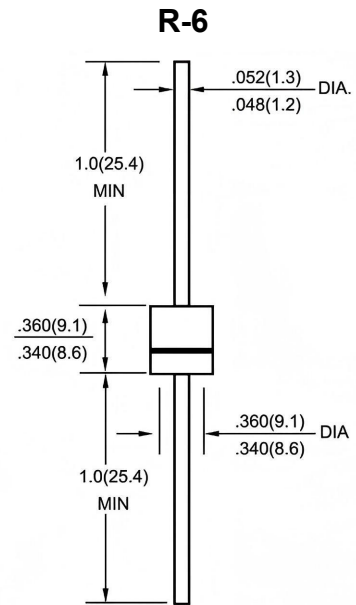


General Purpose Rectifier

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	10	A

Features

- High efficiency, Low VF
- High current capability
- High reliability
- High surge current capability
- Low power loss



Dimensions in inches and (millimeters)

Electrical Characteristics(at $T_J = 25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	10A01	10A02	10A03	10A04	10A05	10A06	10A07	Units	
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 0.375"(9.5mm) lead length at $T_A=50^{\circ}C$	$I_{F(AV)}$	10							A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							A	
Maximum instantaneous forward voltage at 10A	V_F	1.0							V	
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^{\circ}C$							10	μA
		$T_A=100^{\circ}C$							100	
Typical junction capacitance (NOTE 1)	C_J	150							pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10							$^{\circ}C/W$	
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175							$^{\circ}C$	

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Typical characteristics

Fig. 1 Forward Current Derating Curve

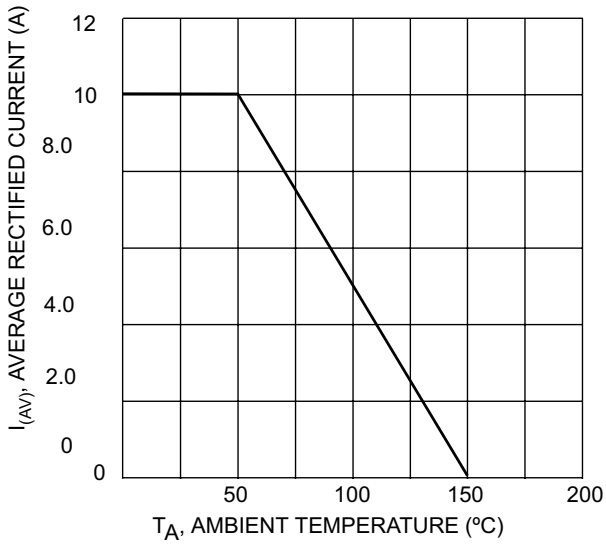


Fig. 2 Typical Forward Characteristics

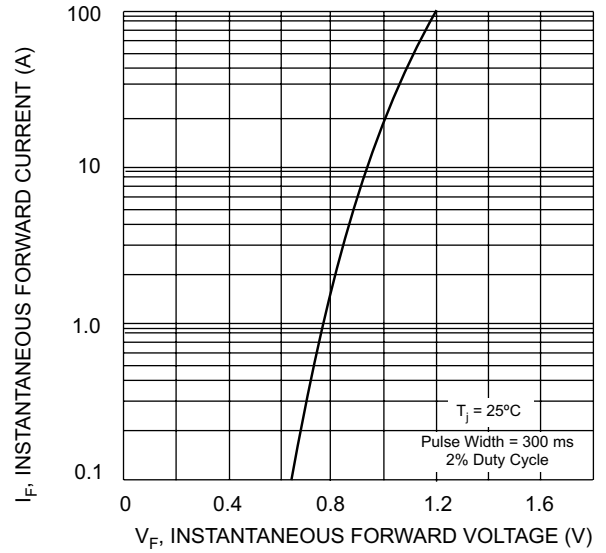


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

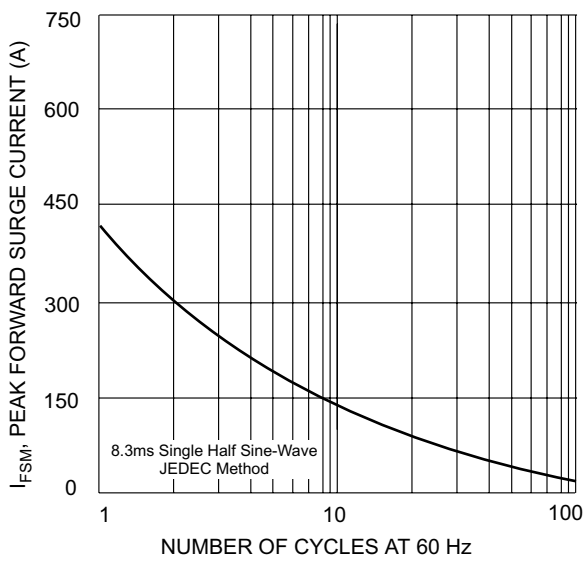
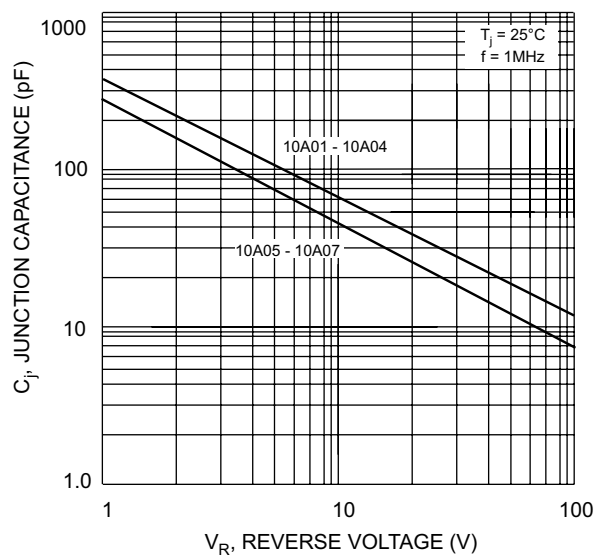


Fig. 4 Typical Junction Capacitance



***Important Usage Information and Disclaimer**

The specifications of Zhuhai Hypersemi Co., Ltd. products are not guarantees of product characteristics. They reflect typical performance expected in standard applications, which may vary with specific uses. Users must conduct prior testing for their applications and make necessary adjustments.

Users are responsible for the safety of applications utilizing our products and must implement adequate safety measures to prevent physical injury, fire, or other risks in case of product failure. It is the user's duty to ensure that application designs comply with all applicable laws and standards. Our products must not be used in any applications where a product failure could reasonably result in personal injury, unless specifically authorized in a signed document by Zhuhai Hypersemi Co., Ltd.

No representations or warranties are made regarding the accuracy or completeness of this information, including any claims of non-infringement of third-party intellectual property rights. Zhuhai Hypersemi Co., Ltd. assumes no liability for any applications or uses of its products and does not grant any licenses to its intellectual property rights or those of others. We also make no claims regarding non-infringement of third-party intellectual property rights that may arise from applications.

Due to technical requirements, our products may contain hazardous substances. For details, please contact your nearest sales office. This document replaces all previous information and may be updated. We reserve the right to make changes.