

**Surface Mount High Efficiency (Ultra Fast) Glass Passivated Rectifiers**

**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 2.0 Ampere**

**Features**

- Low cost
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

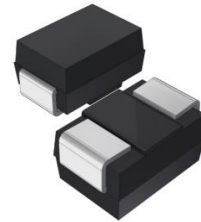
**Mechanical Data**

- Case: JEDEC SMB Molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

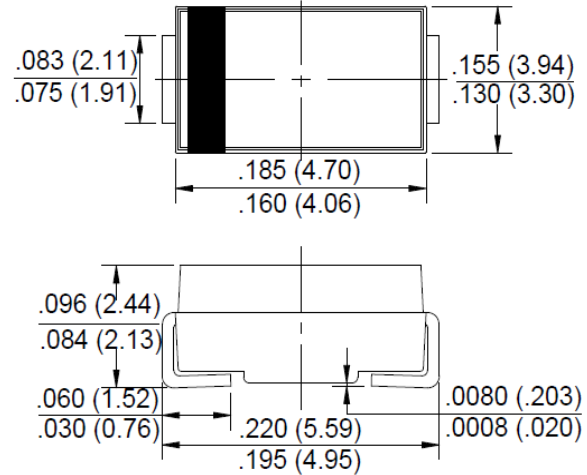
**Applications**

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

**SMB**



**RoHS COMPLIANT**



Package Outline Dimensions in Inches (Millimeters)

**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%.

Characteristics	Symbol	HS2A	HS2B	HS2D	HS2G	HS2J	HS2K	HS2M	Unit
		UF2A	UF2B	UF2D	UF2G	UF2J	UF2K	UF2M	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=55 °C	I(AV)	2.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	60							A
Peak Forward Voltage at 2.0 A DC	VF	1.0		1.3		1.7			V
Maximum DC Reverse Current at Rated @TJ=25°C	IR	5.0							µA
DC Blocking Voltage @TJ=100°C		100							
Maximum Reverse Recovery Time (Note 1)	TRR	50				75			nS
Typical Junction Capacitance (Note2)	CJ	50				30			pF
Operating Junction Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

Notes: 1. Measured with IF=0.5A, IR=1A, IRR=0.25A.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3. The typical data above is for reference only. (

Fig. 1 - Forward Current Derating Curve

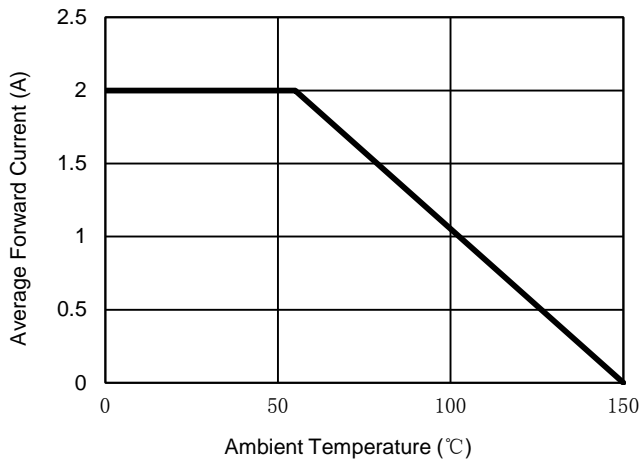


Fig. 2 - Maximum Non-Repetitive Surge Current

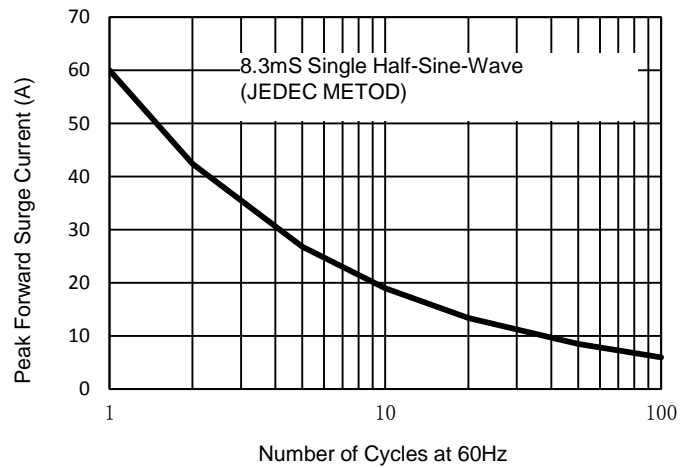


Fig. 3 - Typical Junction Capacitance

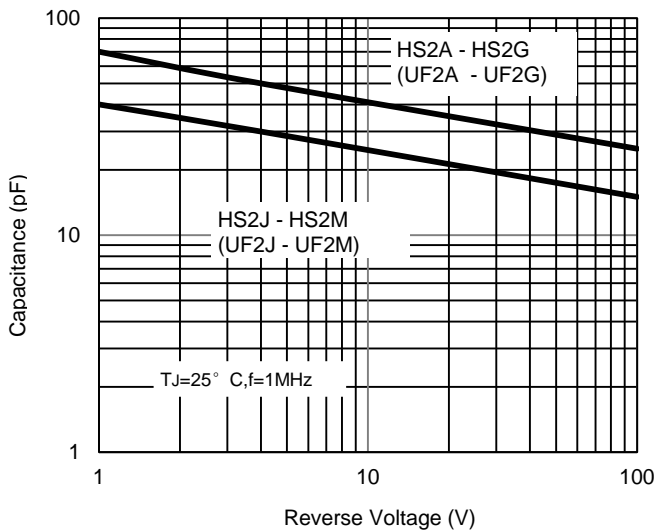


Fig. 4 - Typical Forward Characteristics

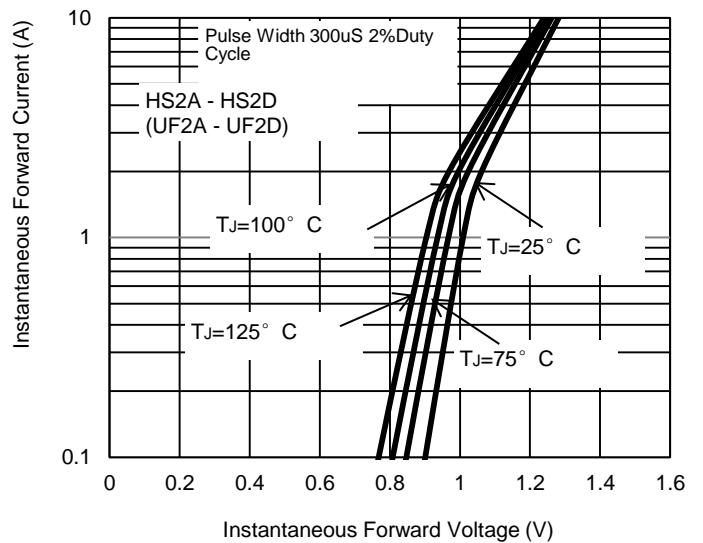


Fig. 5 - Typical Forward Characteristics

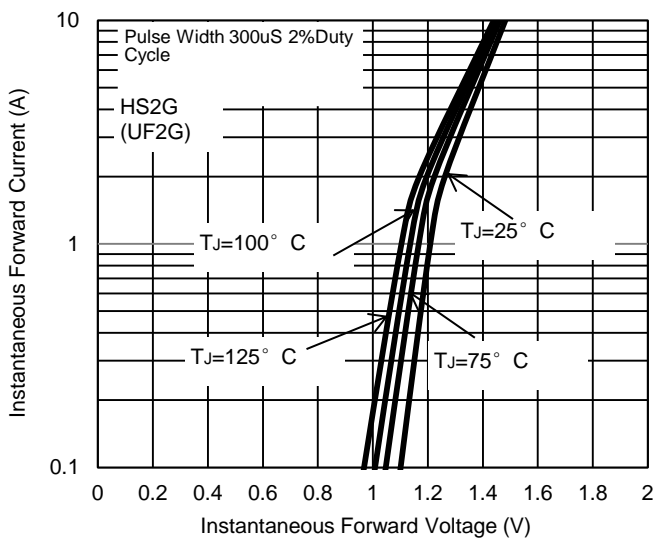
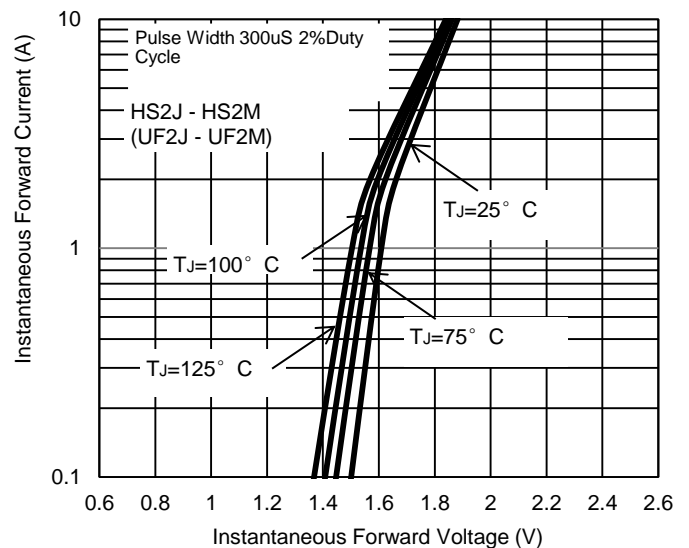


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



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