

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

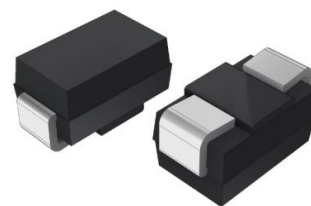
Mechanical Data

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

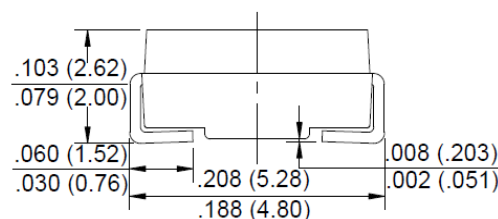
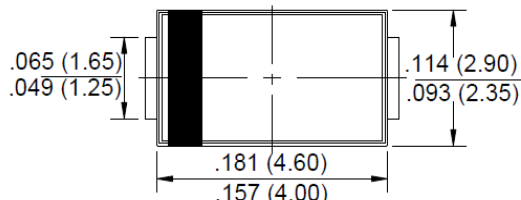
Applications

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

SMA



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	HS2AA	HS2BA	HS2DA	HS2GA	HS2JA	HS2KA	HS2MA	Unit
		UF2AA	UF2BA	UF2DA	UF2GA	UF2JA	UF2KA	UF2MA	
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
Typical Thermal Resistance Junction to Ambient	RθJA	25							°C/W
Operating Junction Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

Notes:1.Measured with I_F=0.5A,I_R=1A,I_{RR}=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.

HS2*A/UF2*A-13-00-00

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Fig. 1 - Forward Current Derating Curve

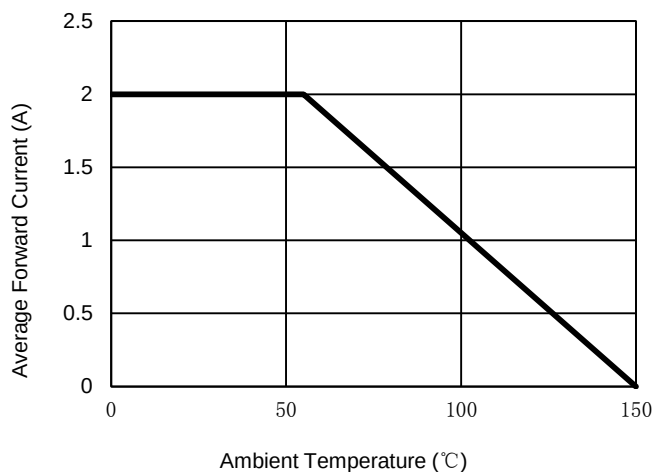


Fig. 2 - Maximum Non-Repetitive Surge Current

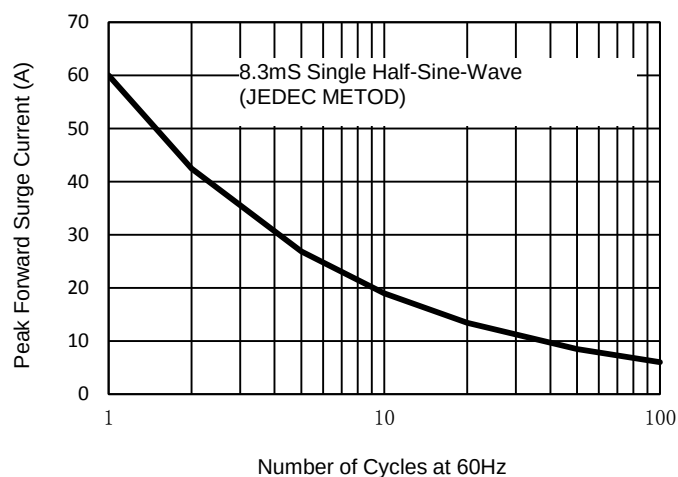


Fig. 3 - Typical Junction Capacitance

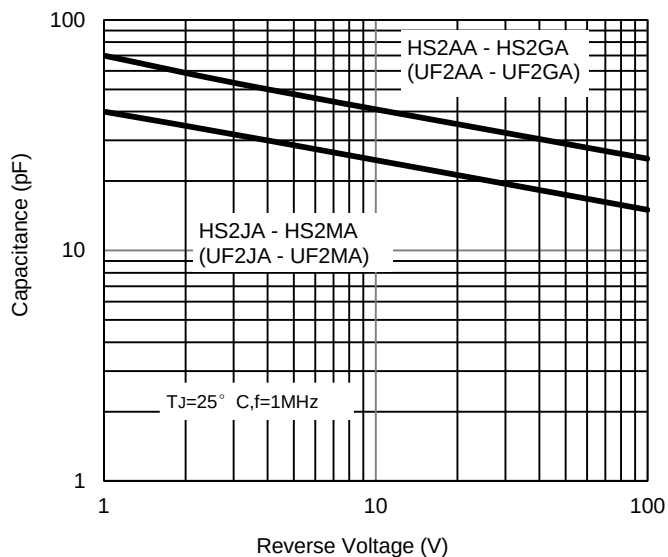


Fig. 4 - Typical Forward Characteristics

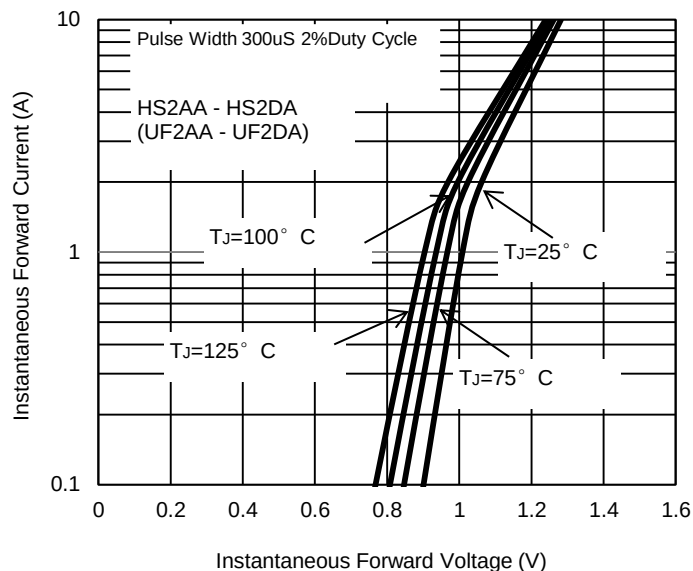


Fig. 5 - Typical Forward Characteristics

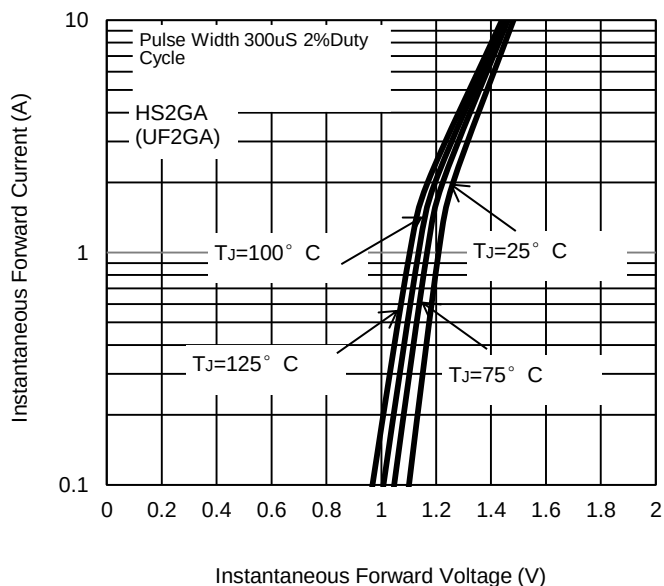
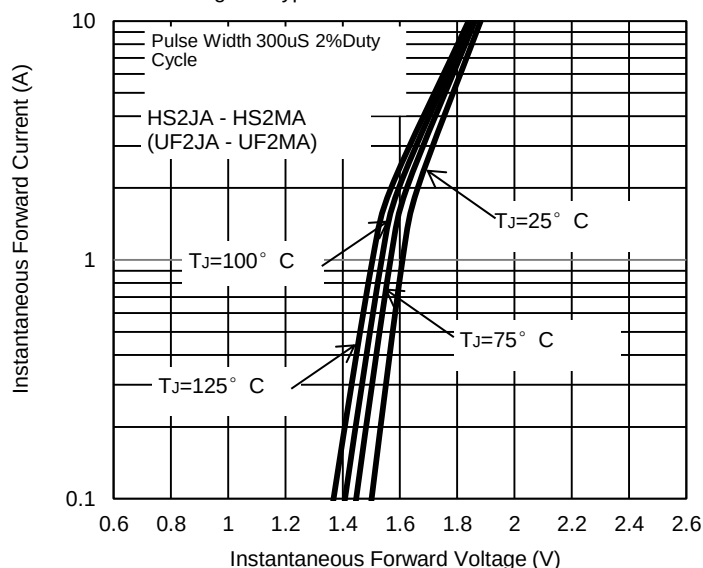


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.

HS2*/UF2*A-13-00-00

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