



# HS2XA / UF2XA SERIES

<p style="text-align: center;"><b>SURFACE MOUNT HIGH EFFICIENCY (ULTRA FAST) GLASS PASSIVATED RECTIFIERS</b></p> <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● Low cost</li> <li>● Diffused junction</li> <li>● Ultra fast switching for high efficiency</li> <li>● Low reverse leakage current</li> <li>● Low forward voltage drop</li> <li>● High current capability</li> <li>● The plastic material carries UL recognition 94V-0</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>● Case: Molded Plastic</li> <li>● Polarity: Indicated by cathode band</li> <li>● Weight: 0.002 ounces, 0.064 grams</li> <li>● Mounting position: Any</li> </ul>	<p style="text-align: center;">REVERSE VOLTAGE - <b>50</b> to <b>1000</b> Volts FORWARD CURRENT - <b>2.0</b> Amperes</p> <p style="text-align: center;"><b>SMA</b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
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## 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 Recurrent 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 Super Imposed on Rated Load(JEDEC Method)	IFSM	60							A	
Peak Forward Voltage at 2.0A DC	VF	1.0		1.3		1.7			V	
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C	IR	5.0				100				µA
Maximum Reverse Recovery Time(Note 1)	TRR	50				75				nS
Typical Junction Capacitance (Note2)	CJ	50				30				pF
Typical Thermal Resistance (Note3)	RθJA	25							°C/W	
Operating 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. Thermal resistance junction to ambient

**RATING AND CHARACTERISTIC CURVES**  
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FIG. 1 – FORWARD CURRENT DERATING CURVE

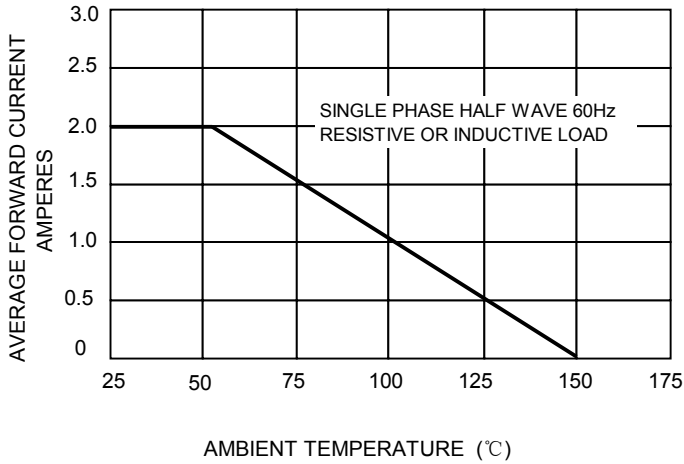


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

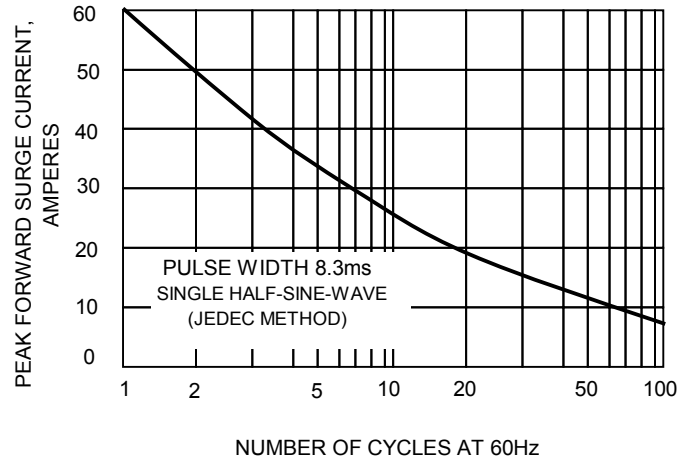


FIG.3 – TYPICAL JUNCTION CAPACITANCE

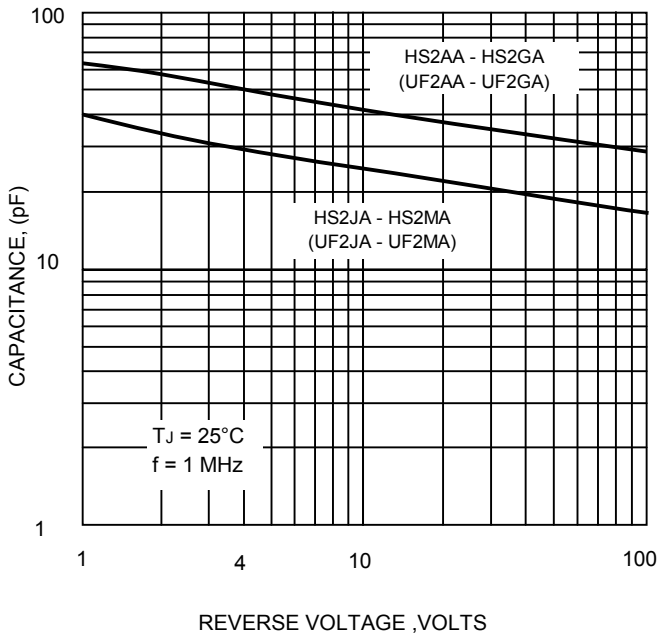


FIG.4-TYPICAL FORWARD CHARACTERISTICS

