

# HS2A /UF2A THRU HS2M//UF2M

**SURFACE MOUNT  
HIGH EFFICIENCY (ULTRA FAST)  
GLASS PASSIVATED RECTIFIERS**

**REVERSE VOLTAGE**  
50 to 1000 Volts  
**Forward Current**  
2.0 Amperes

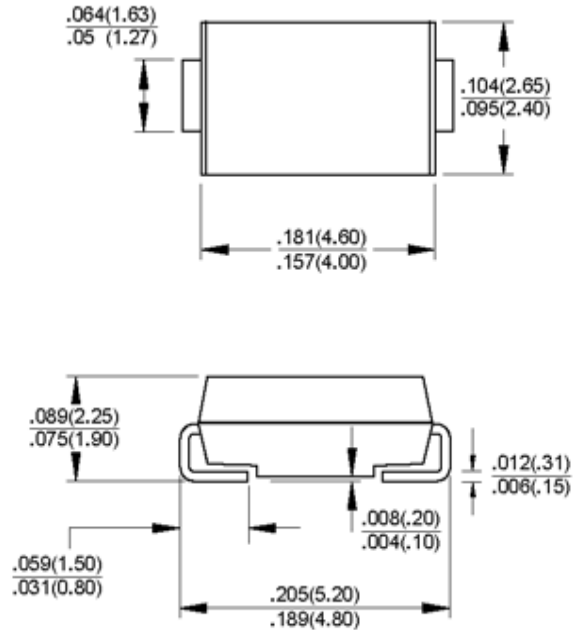
## FEATURES

- Low cost
- Diffused junction
- 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: Molded Plastic
- Polarity: Color band denotes cathode
- Weight: 0.003 ounces, 0.093 grams
- Mounting position: Any

## DO-214AC (SMA)



**Dimensions in inches and (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 Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @T <sub>A</sub> =55 °C	I <sub(av)< sub=""></sub(av)<>	2.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	60							A	
Peak Forward Voltage at 2.0A DC	V <sub>F</sub>	1.0		1.3		1.7			V	
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0				100				µA
Maximum Reverse Recovery Time(Note 1)	T <sub>RR</sub>	50				75				nS
Typical Junction Capacitance (Note2)	C <sub>J</sub>	50				30				pF
Typical Thermal Resistance (Note3)	R <sub>θJA</sub>	25							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C	

NOTES: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=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 HS2A /UF2A THRU HS2M/UF2M

FIG. 1 – FORWARD CURRENT DERATING CURVE

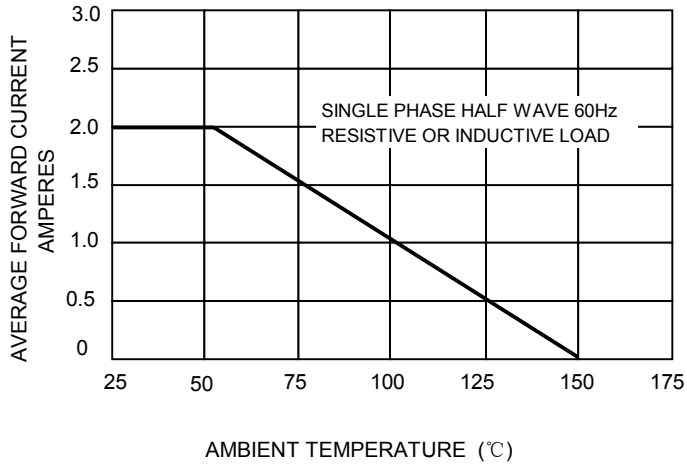


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

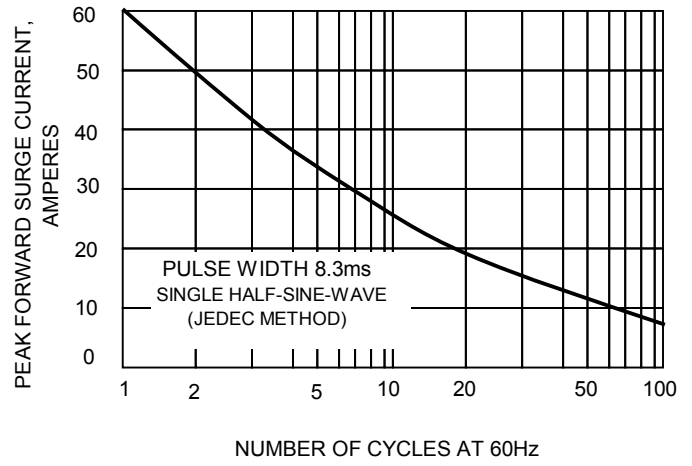


FIG.3 – TYPICAL JUNCTION CAPACITANCE

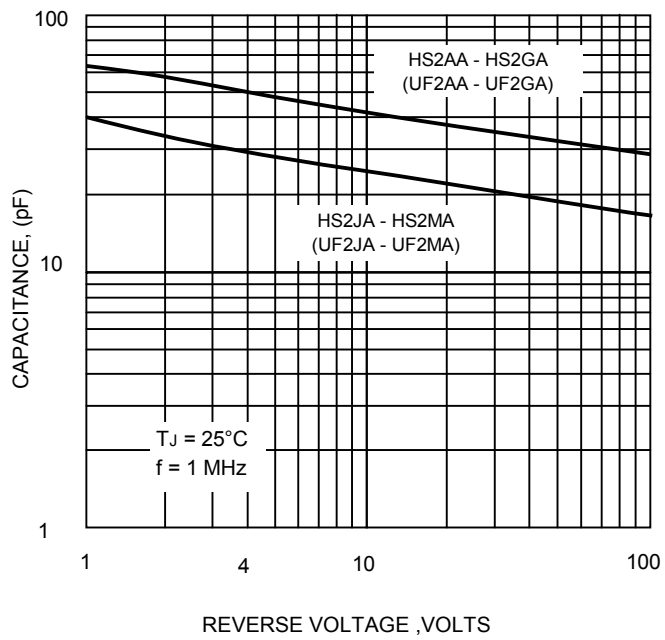


FIG.4-TYPICAL FORWARD CHARACTERISTICS

