

**SURFACE MOUNT  
HIGH EFFICIENCY (ULTRA FAST)  
GLASS PASS IVATED RECTIFIERS**

**REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 2.0 Amperes**

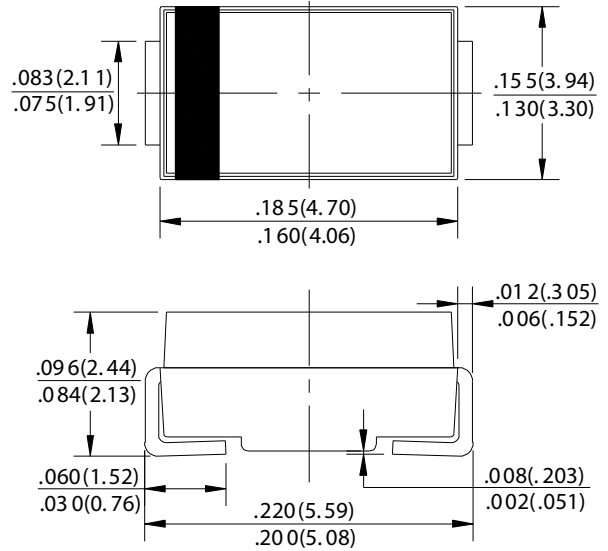
**FEATURES**

- 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

**SMB**



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	HS 2A	HS 2B	HS 2D	HS 2G	HS 2J	HS 2K	HS 2M	UNIT	
		UF 2A	UF 2B	UF 2D	UF 2G	UF 2J	UF 2K	UF 2M		
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

FIG. 1 – FORWARD CURRENT DERATING CURVE

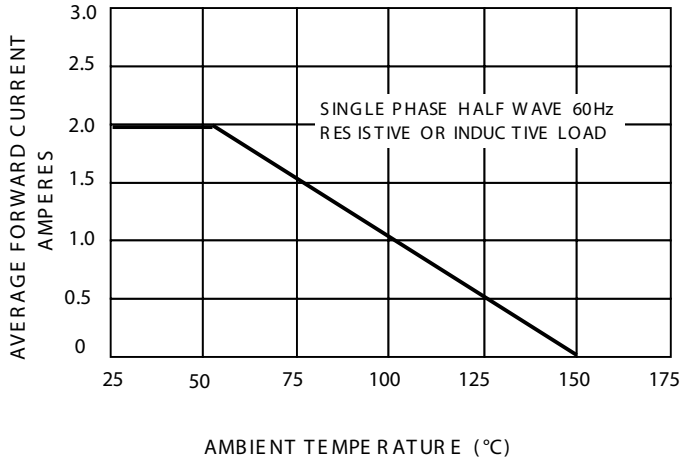


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

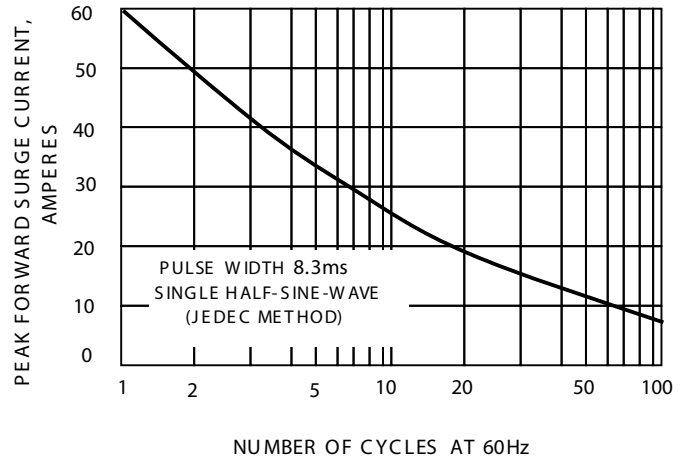


FIG.3 – TYPICAL JUNCTION CAPACITANCE

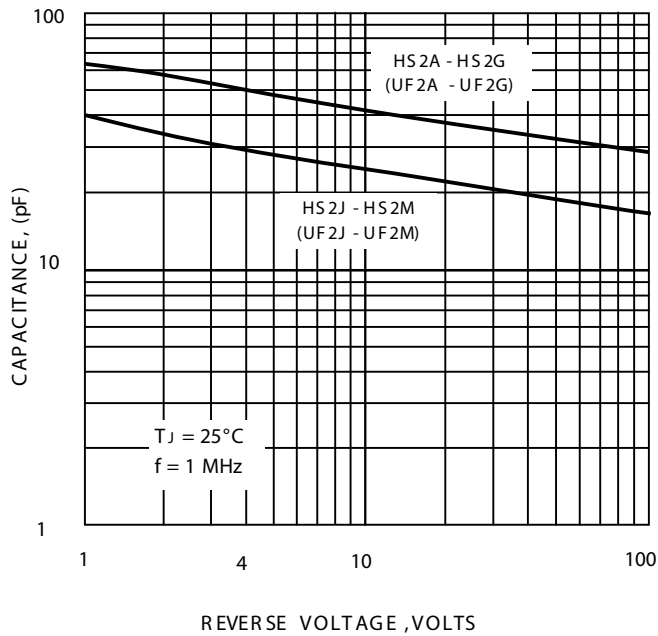


FIG.4-TYPICAL FORWARD CHARACTERISTICS

