

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

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

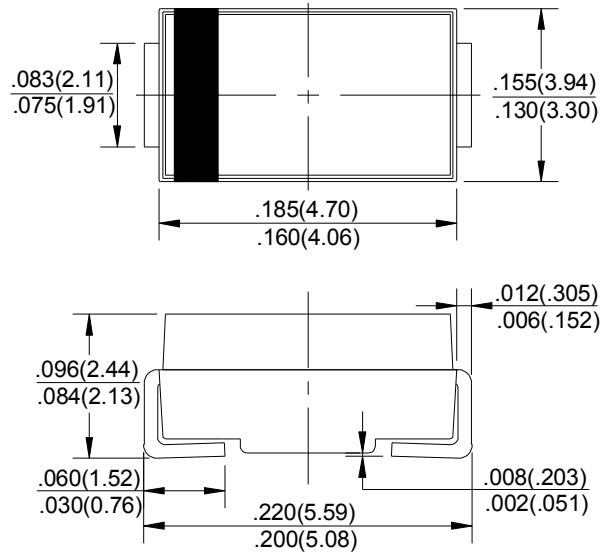
### FEATURES

- 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

### 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	HS2A	HS2B	HS2D	HS2G	HS2J	HS2K	HS2M	UNIT	
		UF2A	UF2B	UF2D	UF2G	UF2J	UF2K	UF2M		
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 at Rated DC Blocking Voltage @TJ=25°C @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

FIG. 1 – FORWARD CURRENT DERATING CURVE

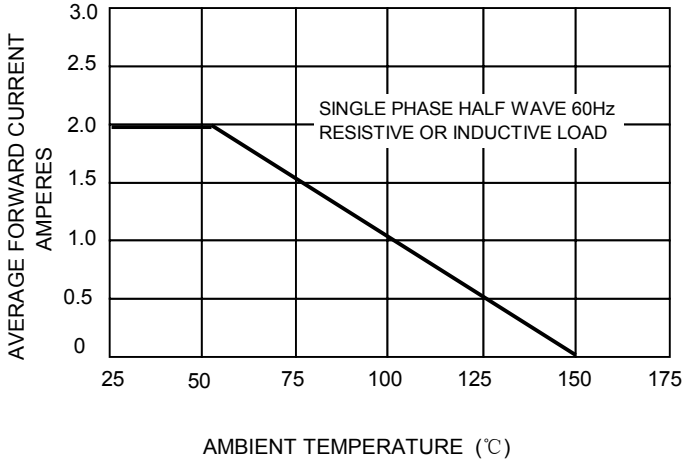


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

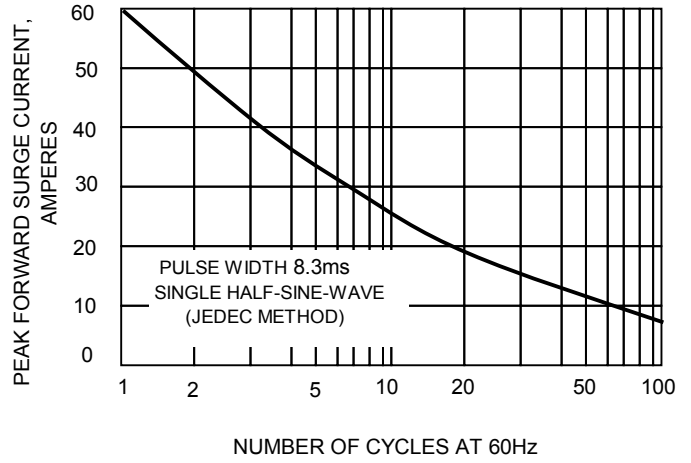


FIG.3 – TYPICAL JUNCTION CAPACITANCE

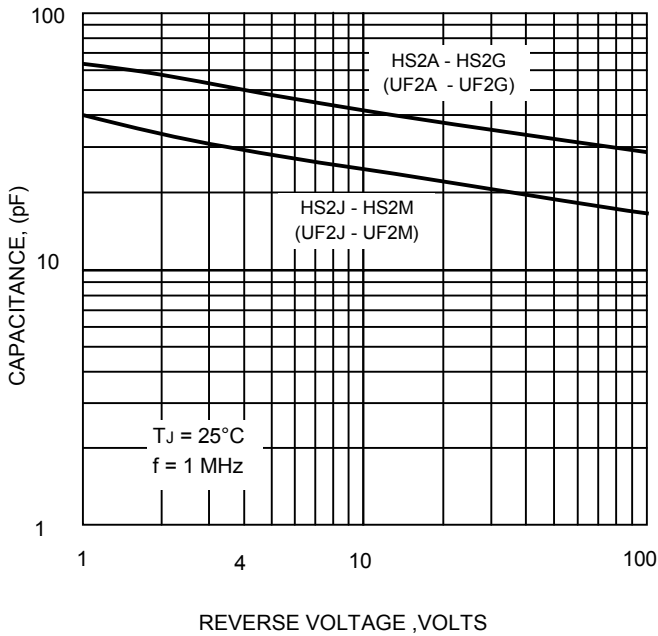


FIG.4-TYPICAL FORWARD CHARACTERISTICS

