

SURFACE MOUNT GLASS HIGH EFFICIENCY RECTIFIERS

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

FEATURES

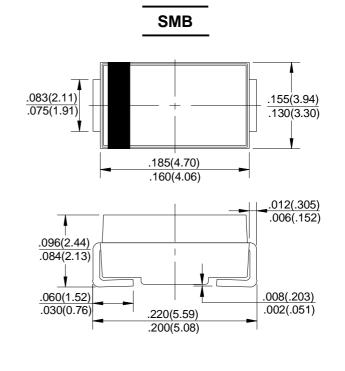
- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

●Case: Molded Plastic

Polarity:Color band denotes cathodeWeight: 0.003 ounces,0.093 grams

Mounting position: Any



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
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 =50 ℃	I(AV)	2.0							А
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	60							A
Peak Forward Voltage at 2.0A DC(Note1)	VF	1.0 1.3				1.7		V	
Maximum DC Reverse Current @TJ=25℃ at Rated DC Blocking Voltage @TJ=100℃	lR	5.0 100							uA
Maximum Reverse Recovery Time(Note 1)	Trr	50 75					nS		
Typical Junction Capacitance (Note1)	CJ	50 30						pF	
Typical Thermal Resistance (Note2)	Reja	25						°C/W	
Operating Temperature Range	TJ	-50 to +150							$^{\circ}$ C
Storage Temperature Range	Tstg	-50 to +150							$^{\circ}\!\mathbb{C}$
	•								

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. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT FIG. 1 – FORWARD CURRENT DERATING CURVE 3.0 60 PEAK FORWARD SURGE CURRENT, AVERAGE FORWARD CURRENT 2.5 50 SINGLE PHASE HALF WAVE 60Hz 2.0 AMPERES 40 RESISTIVE OR INDUCTIVE LOAD AMPERES 1.5 30 1.0 20 PULSE WIDTH 3.3ms SINGLE HALF-SINE-WAVE 0.5 10 (JEDEC METHOD) 0 0 25 50 75 100 125 150 175 2 10 20 50 100 5 AMBIENT TEMPERATURE (℃) NUMBER OF CYCLES AT 60Hz FIG.3 - TYPICAL JUNCTION CAPACITANCE FIG.4-TYPICAL FORWARD CHARACTERISTICS 100 10 INSTANTANEOUS FORWARD CURRENT, (A) HS2A - HS2G HS2A -HS2D HS2G 1.0 CAPACITANCE, (pF) HS2J - HS2M 10 0.1 HS2J -HS2M $T_J = 25^{\circ}C$ TJ = 25°C f = 1 MHzPULSE WIDTH 300us 0.01 1.6 1.8 0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 100 10 4 INSTANTANEOUS FORWARD VOLTAGE, VOLTS REVERSE VOLTAGE, VOLTS