



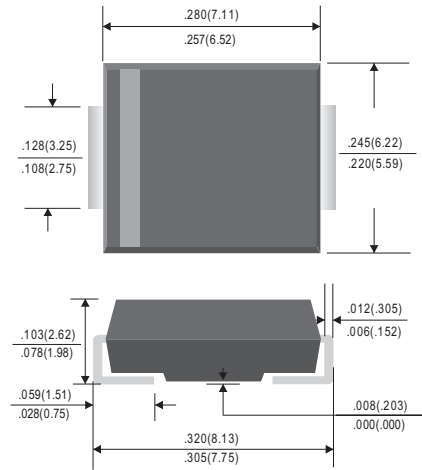
**SM7 PACKAGE**

**FEATURES**

- \* Glass passivated device
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Moisture Sensitivity Level 1
- \* **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"

**MECHANICAL DATA**

- \* Case: Molded plastic, DO-214A6 (SM7)
- \* Epoxy: Device has Ulflammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.8%gram ( Approximated)



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive of inductive load.  
For capacitive load, derate current by 20%

RATINGS	SYMBOL	PHFM' 01	PHFM302	PHFM303	PHFM304	PHFM305	PHFM306	PHFM307	PHFM308	UNIT	
Marking Code		' H1	' H2	' H3	' H4	' H5	' H6	' <7	' H8		
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	Volts	
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	Volts	
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	Volts	
Maximum Average Forward Current at TA = 50°C	Io	' .0								Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	%\$0								Amps	
Typical Thermal Resistance (Note 1)	ROJA	*0								°C/W	
	ROJC	%									
Typical Junction Capacitance (Note 2)	CJ	+)					*'				pF
Operating Temperature Range	TJ	-55 to +150								°C	
Storage Temperature Range	TsTg	-55 to +150								°C	

CHARACTERISTICS	SYMBOL	PHFM' 01	PHFM302	PHFM303	PHFM304	PHFM305	PHFM306	PHFM307	PHFM308	UNIT	
Maximum Forward Voltage at 2.0A DC	VF	1.00			1.30		1.70			Volts	
Maximum Full load Reverse Current, Full cycle Average TA=55°C	IR	50.00								µAmps	
Maximum DC Reverse Current @ TA = 25°C		5.0									
at Rated DC Blocking Voltage @ TA = 1\$\$°C		' 00.0									
Maximum Reverse Recovery Time (Note 3)	Trr	50					75				nSec

NOTES :1. Thermal Resistance: Mounted on PCB.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. Test Conditions: IF = 0.5A, IR = 1.0A, IRR = 0.25A

RATING AND CHARACTERISTICS CURVES (PHFM301 THRU PHFM308)

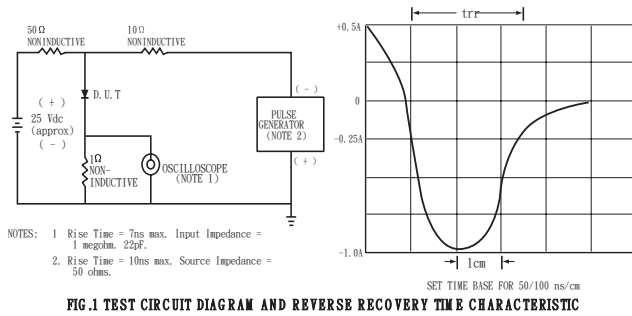


FIG. 1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

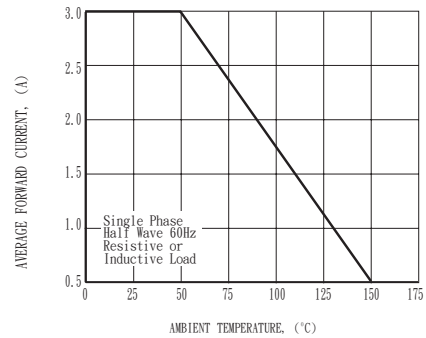


FIG. 2 TYPICAL FORWARD CURRENT DERATING CURVE

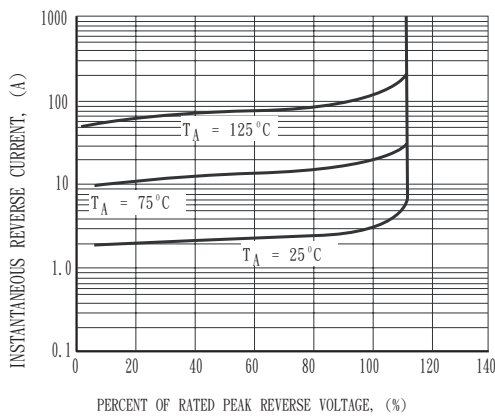


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

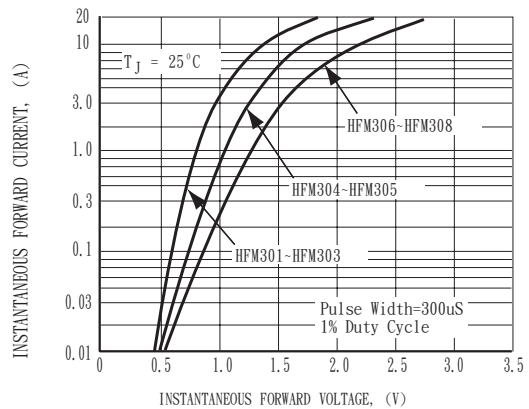


FIG. 4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

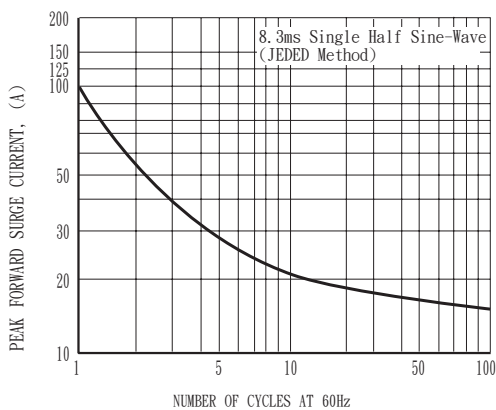


FIG. 5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

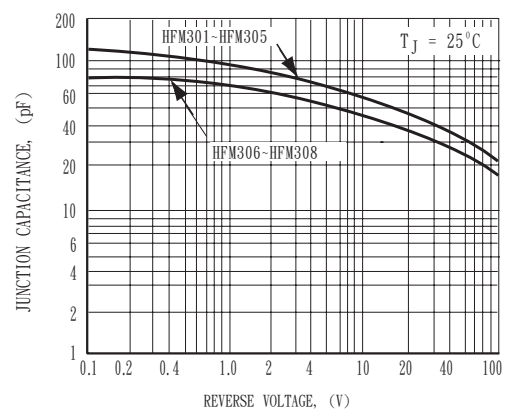


FIG. 6 TYPICAL JUNCTION CAPACITANCE