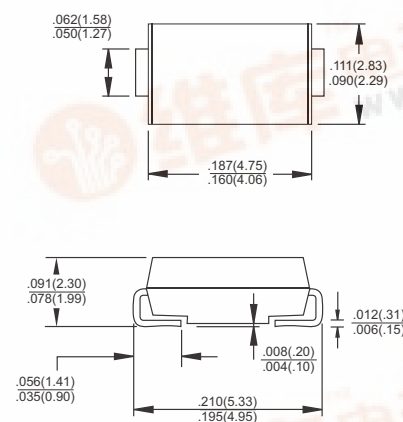


	HS1A THRU HS1M 1.0 AMP. High Efficient Surface Mount Rectifiers									
	Voltage Range 50 to 1000 Volts Current 1.0 Ampere									
Features ✧ Glass passivated junction chip. ✧ For surface mounted application ✧ Low forward voltage drop ✧ Low profile package ✧ Built-in stain relief, ideal for automatic placement ✧ Fast switching for high efficiency ✧ High temperature soldering: 260°C/10 seconds at terminals ✧ Plastic material used carries Underwriters Laboratory Classification 94V-O	SMA/DO-214AC  Dimensions in inches and (millimeters)									
Mechanical Data ✧ Cases: Molded plastic ✧ Terminals: Solder plated ✧ Polarity: Indicated by cathode band ✧ Packing: 12mm tape per E1A STD RS-481 ✧ Weight: 0.064 gram										
Maximum Ratings and Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%										
Type Number	Symbol	HS 1A	HS 1B	HS 1D	HS 1F	HS 1G	HS 1J	HS 1K	HS 1M	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current See Fig.2	I _(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.0				1.3	1.7			V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	I _R	5.0								uA
		100								uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				75				nS
Typical Junction Capacitance (Note 2)	C _j	20				15				pF
Maximum Thermal Resistance (Note 3)	R _{θJA}	70								°C/W
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 2. Measured at 1 MHz and Applied $V_R=4.0$ Volts
 3. Mounted on P.C.B. with 0.2"x0.2" (5 x 5 mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (HS1A THRU HS1M)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

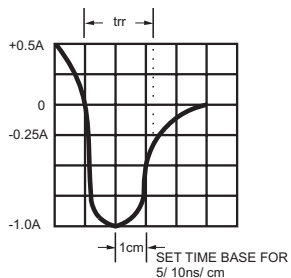
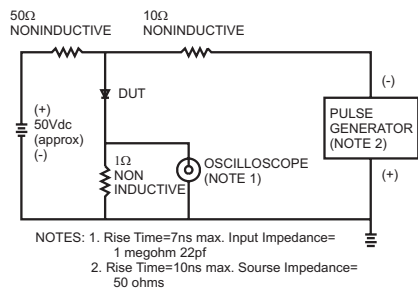


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

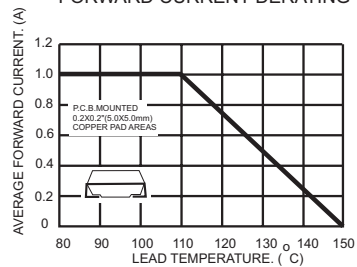


FIG.3- TYPICAL REVERSE CHARACTERISTICS

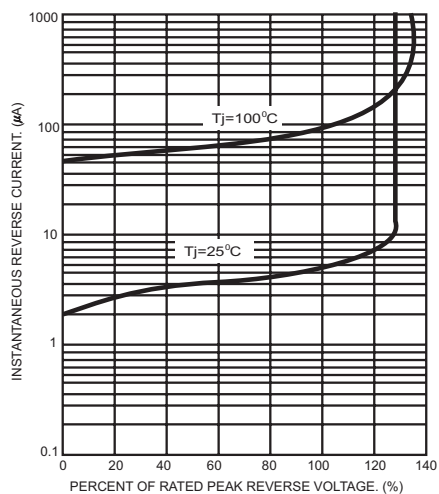


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

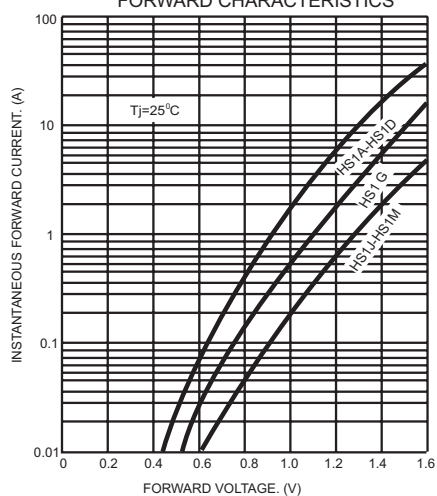


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

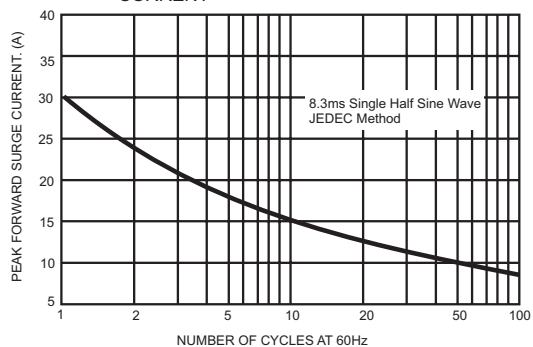


FIG.6- TYPICAL JUNCTION CAPACITANCE

