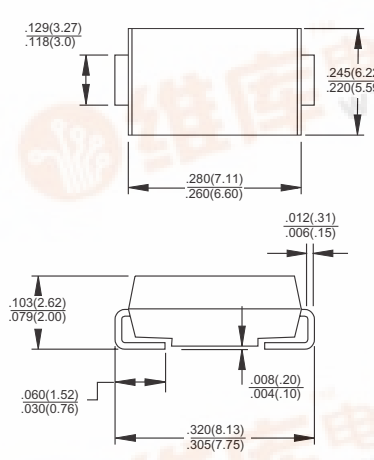


TSC 	HS3A THRU HS3M 3.0 AMPS. High Efficient Surface Mount Rectifiers									
	Voltage Range 50 to 1000 Volts Current 3.0 Amperes									
Features ✧ Glass passivated junction chip. ✧ For surface mounted application ✧ Low forward voltage drop ✧ Low profile package ✧ Built-in stain relief, ideal for automatic placement ✧ Fast switching for high efficiency ✧ High temperature soldering: 260°C/10 seconds at terminals ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0	SMC/DO-214AB  Dimensions in inches and (millimeters)									
Mechanical Data ✧ Cases: Molded plastic ✧ Terminals: Solder plated ✧ Polarity: Indicated by cathode band ✧ Packing: 16mm tape per E1A STD RS-481 ✧ Weight: 0.21 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 3A	HS 3B	HS 3D	HS 3F	HS 3G	HS 3J	HS 3K	HS 3M	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)	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150								A
Maximum Instantaneous Forward Voltage @ 3.0A	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	10.0 200								uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				75				nS
Typical Junction Capacitance (Note 2)	C _j	80				50				pF
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$
 2. Measured at 1 MHz and Applied $V_R=4.0$ Volts
 3. Mounted on P.C.B. with 0.6"x0.6" (16 x 16 mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (HS3A THRU HS3M)

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

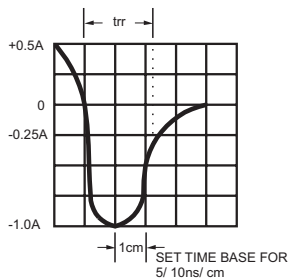
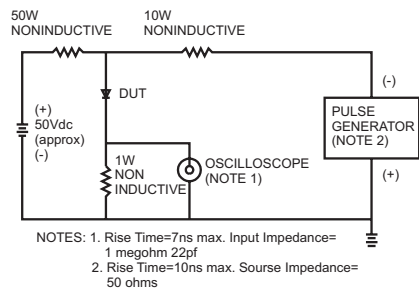


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

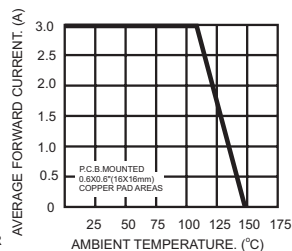


FIG.3- TYPICAL REVERSE CHARACTERISTICS

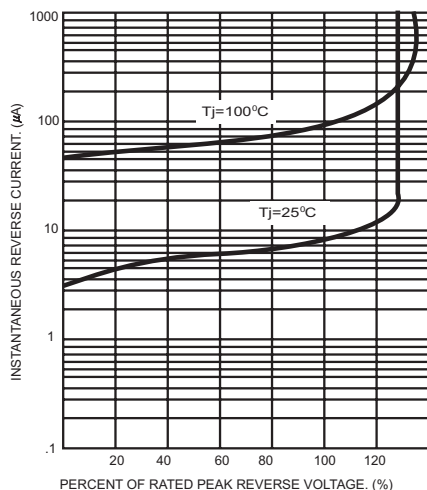


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

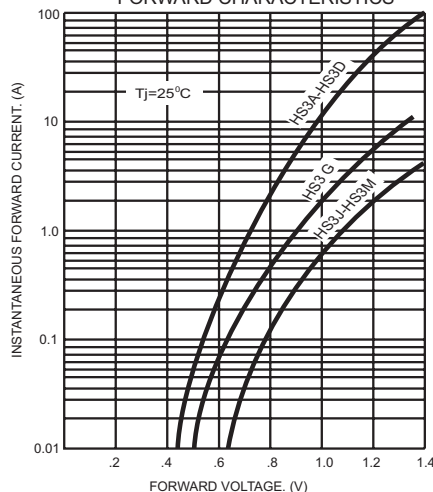


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

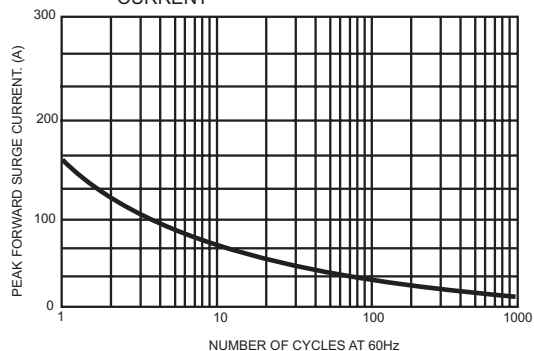


FIG.6- TYPICAL JUNCTION CAPACITANCE

