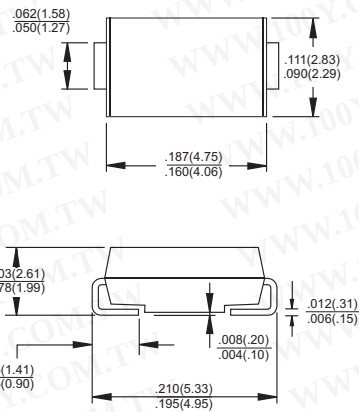


TSC SS12 THRU SS110		1.0 AMP. Surface Mount Schottky Barrier Rectifiers							
		Voltage Range 20 to 100 Volts Current 1.0 Ampere							
Features ✧ For surface mounted application ✧ Metal to silicon rectifier, majority carrier conduction ✧ Low forward voltage drop ✧ Easy pick and place ✧ High surge current capability ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-O ✧ Epitaxial construction ✧ High temperature soldering: 260°C/ 10 seconds at terminals		SMA/DO-214AC  Dimensions in inches and (millimeters)							
Mechanical Data ✧ Case: Molded plastic ✧ Terminals: Solder plated ✧ Polarity: Indicated by cathode band ✧ Packaging: 12mm tape per EIA 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	SS 12	SS 13	SS 14	SS 15	SS 16	SS 19	SS 110	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	V
Maximum Average Forward Rectified Current at T _L (See Fig. 1)	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 (Note 1) @ 1.0A	V _F	0.5		0.75		0.80		V	
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	I _R	0.4				0.05		mA	
		10		5.0					
Maximum DC Reverse Current at VR=33V & T _A =50°C	HT _{IR}	-				5.0		uA	
Typical Junction Capacitance (Note 3)	C _j	50							pF
Typical Thermal Resistance (Note 2)	R _θ JL	28							°C/W
	R _θ JA	88							°C/W
Operating Temperature Range	T _J	-65 to +125			-65 to +150			°C	
Storage Temperature Range	T _{STG}	-65 to +150							°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
 2. Measured on P.C.Board with 0.2 x 0.2"(5.0 x 5.0mm) Copper Pad Areas.
 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SS12 THRU SS110)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

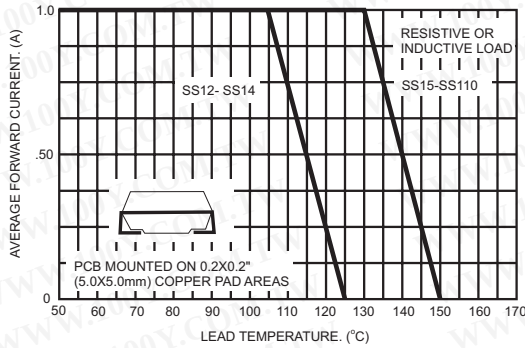


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

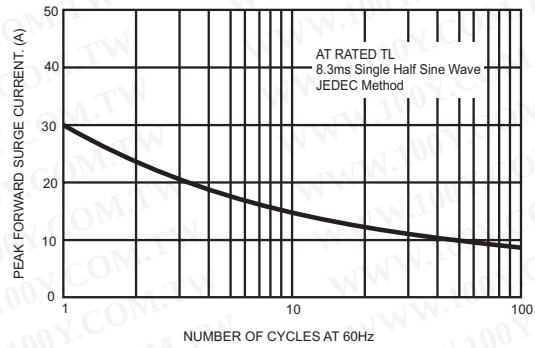


FIG.3- TYPICAL FORWARD CHARACTERISTICS

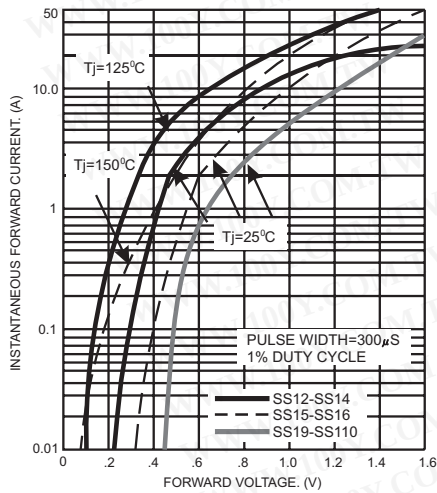


FIG.4- TYPICAL REVERSE CHARACTERISTICS

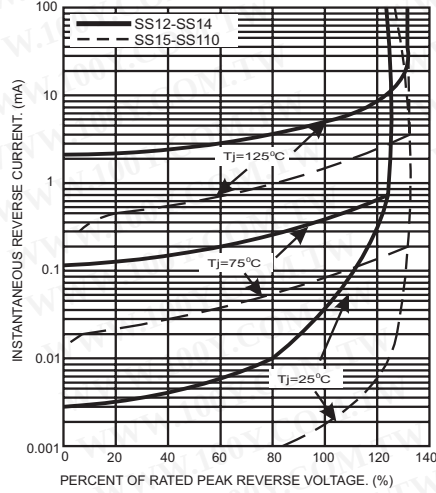


FIG.5- TYPICAL JUNCTION CAPACITANCE

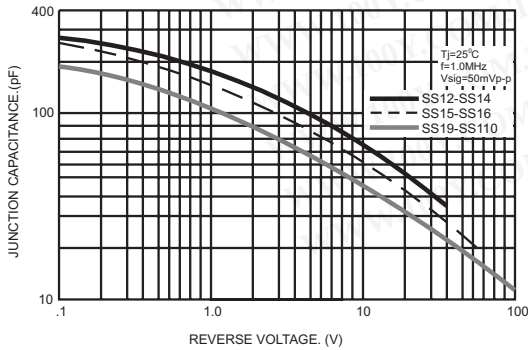


FIG.6- TYPICAL CAPACITANCE

