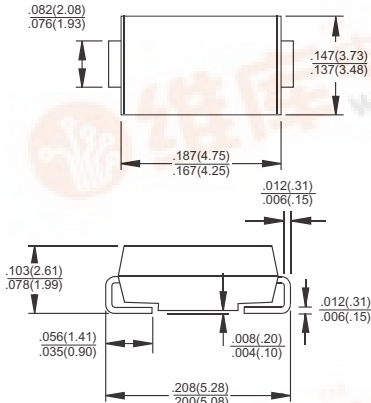


TSC 95	ES2A THRU ES2J 2.0 AMPS. Super Fast Surface Mount Rectifiers									
		Voltage Range 50 to 600 Volts Current 2.0 Amperes								
Features ✧ Glass passivated junction chip ✧ For surface mounted application ✧ Low profile package ✧ Built-in strain relief ✧ Ideal for automated placement ✧ Easy pick and place ✧ Superfast recovery time for high efficiency ✧ Glass passivated chip junction ✧ High temperature soldering: 260°C/10 seconds at terminals ✧ Plastic material used carries Underwriters Laboratory Classification 94V-O		SMB/DO-214AA  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: 0.093 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	ES 2A	ES 2B	ES 2C	ES 2D	ES 2F	ES 2G	ES 2H	ES 2J	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current See Fig. 1	I _(AV)	2.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50								A
Maximum Instantaneous Forward Voltage @ 2.0A	V _F	0.95		1.3			1.7		V	
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	I _R	10 350								uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35								nS
Typical Junction Capacitance (Note 2)	C _j	25		75			20		pF	
Maximum Thermal Resistance (Note 3)	R θ _{JA} R θ _{JL}	20								°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: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$
 2. Measured at 1 MHz and Applied $V_R = 4.0\text{ Volts}$
 3. Units Mounted on P.C.B. 0.4 x 0.4" (10 x 10mm) Pad Areas

RATINGS AND CHARACTERISTIC CURVES (ES2A THRU ES2J)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

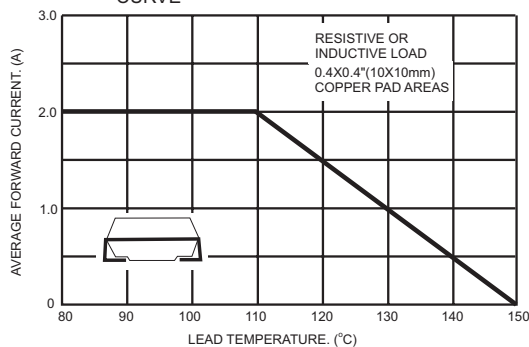


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

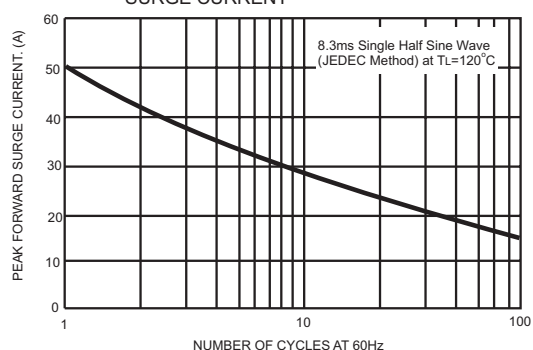


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

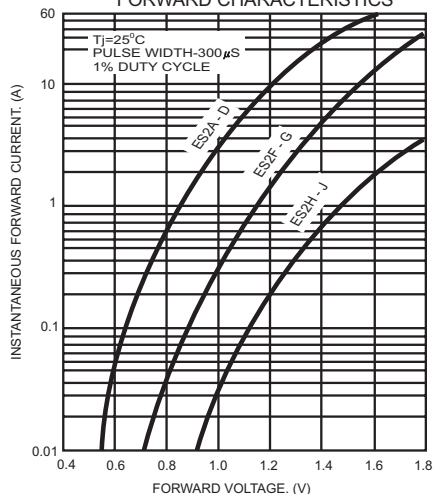


FIG.4- TYPICAL REVERSE CHARACTERISTICS

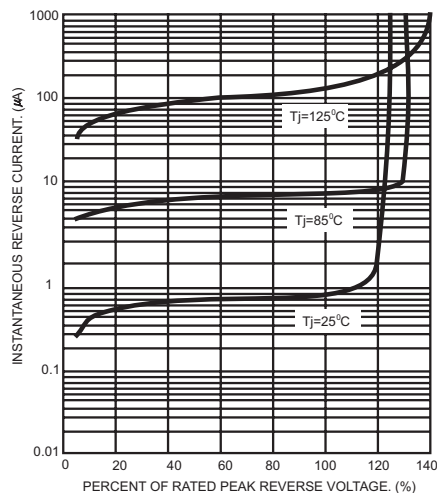


FIG.5- TYPICAL JUNCTION CAPACITANCE

