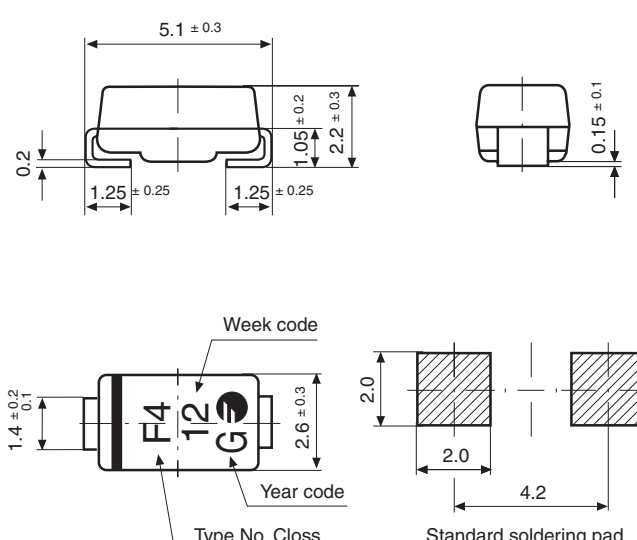



1 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier

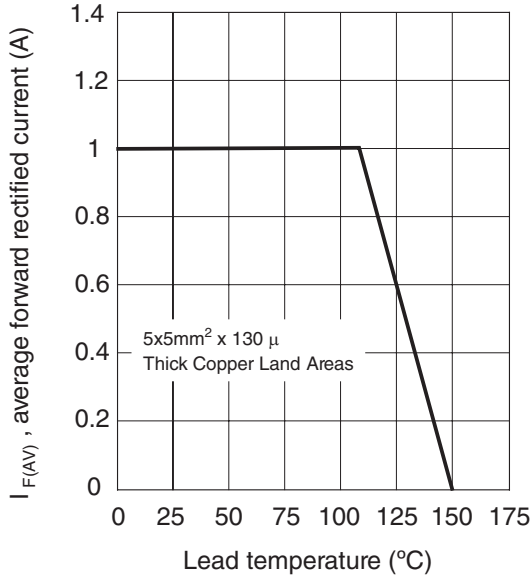
<p>Dimensions in mm.</p>  <p>Top view dimensions: 5.1 ± 0.3, 1.25 ± 0.25, 1.25 ± 0.25, 0.2, 1.05 ± 0.2, 2.2 ± 0.3.</p> <p>Side view dimensions: 0.15 ± 0.1.</p> <p>Detail view dimensions: 1.4 ± 0.2, 0.1, 2.0, 2.0, 4.2, 2.6 ± 0.3.</p> <p>Marking: F4, 12, G, Week code, Year code, Type No. Cross.</p> <p>Standard soldering pad: 2.0 x 2.0.</p>	<p>CASE: SMA/DO-214AC</p>	<p>Voltage 50 to 600 V</p>	<p>Current 1.0 A</p>
			
<ul style="list-style-type: none"> Glass passivated junction High current capability The plastic material carries U/L 94 V-0 Low profile package Easy pick and place High temperature soldering 260 °C 10 sec 			
<p>MECHANICAL DATA</p> <p>Terminals: Solder plated, solderable per IEC 68-2-20.</p> <p>Standard Packaging: 4 mm. tape (EIA-RS-481).</p> <p>Weight: 0.064 g.</p>			

Maximum Ratings and Electrical Characteristics at 25 °C

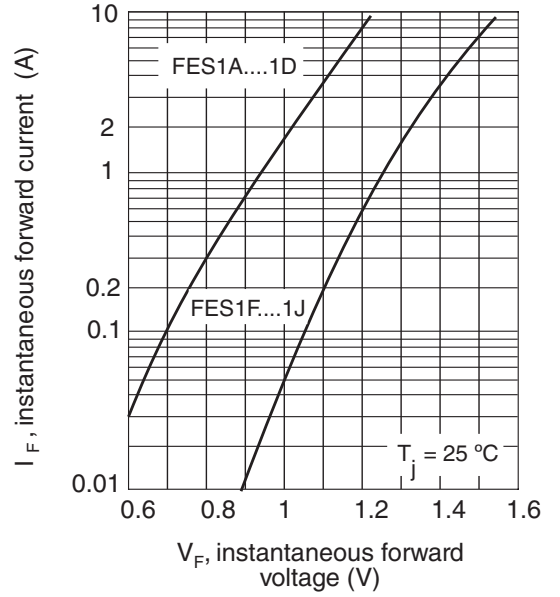
		FES1A	FES1B	FES1D	FES1F	FES1G	FES1J
Marking Code		U1	U2	U3	U4	U5	U6
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600
V_{RMS}	Maximum RMS Voltage	35	70	140	210	280	420
V_{DC}	Maximum DC Blocking Voltage	50	100	200	300	400	600
$I_{F(AV)}$	Forward current at $T_L = 110\text{ °C}$	1.0 A					
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 A					
V_F	Maximum Instantaneous Forward Voltage at 1.0A	0.95 V			1.25 V		
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_a = 25\text{ °C}$		$T_a = 100\text{ °C}$			
		5 μ A		100 μ A			
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	50 ns					
C_j	Typical Junction Capacitance (1MHz; -4V)	8 pF					
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (5x5 mm ² x 130 μ Copper Area)	27 °C/W		75 °C/W			
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C					
E_{RSM}	Maximum non repetitive peak reverse Avalanche Energy $T_j = 25\text{ °C}$, $I_{(BR)} = 1A$	20 mJ					

Rating And Characteristic Curves

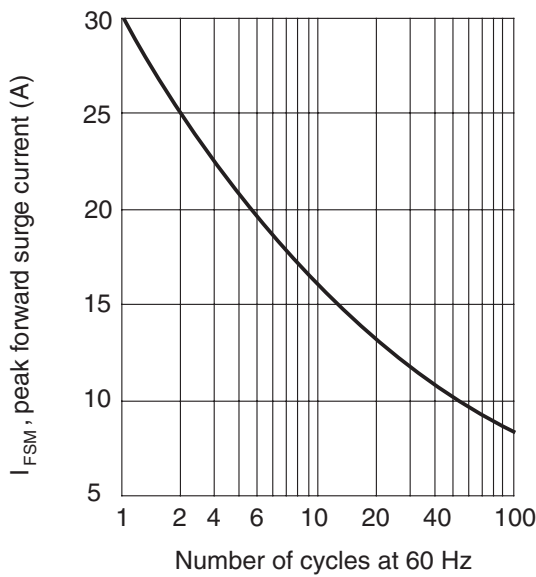
FORWARD CURRENT DERATING CURVE



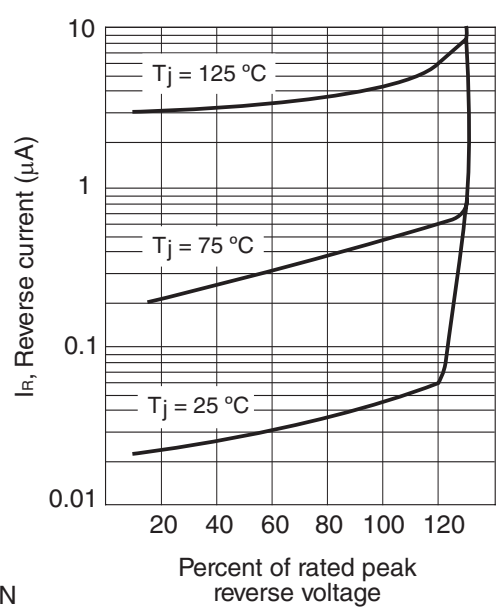
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE

