

1 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier

<p>Dimensions in mm.</p> <p>CASE: M1F(DO219AA)</p>	<p>Voltage 50 to 600 V</p> <p>Current 1.0 A</p> <div style="text-align: center; margin: 10px 0;"> </div> <ul style="list-style-type: none"> For surface mounted application Low profile package Low power loss, high efficiency, Ideal for automated placement Glass Passivated chip junction High temperature soldering: 260 °C / 10 seconds at terminals <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> Case: Sub SMA plastic case Terminal: Pure tin plated, lead free. Polarity: Color band cathode end Packaging: 12 mm. tape per EIA STD RS-481 Weight: 0.015 g. Marking code refer to Note.
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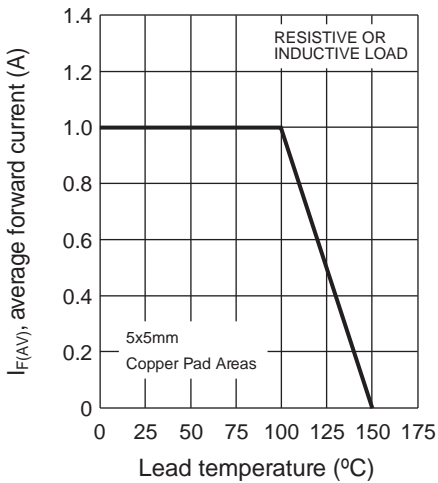
Maximun Ratings and Electrical Characteristics at 25 °C

Marking Code		FES1AL	FES1BL	FES1CL	FES1DL	FES1FL	FES1GL	FES1HL	FES1JL
Marking Code		EALYM	EBLYM	ECLYM	EDLYM	EFLYM	EGLYM	EHLYM	EJLYM
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	150	200	300	400	500	600
V_{RMS}	Maximum RMS Voltage (V)	35	70	105	140	210	280	350	420
V_{DC}	Maximum DC Blocking Voltage (V)	50	100	150	200	300	400	500	600
$I_{F(AV)}$	Forward current at $T_L = 120\text{ °C}$	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			1.3 V		1.7 V		
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_a = 25\text{ °C}$ 5 μ A				$T_a = 100\text{ °C}$ 100 μ A			
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	35 nS							
C_j	Typical Junction Capacitance (1MHz; -4V)	10 pF				8 pF			
$R_{th(j-l)}$	Maximum Thermal Resistance	85 °C/W							
$R_{th(j-a)}$	(5x5 mm ² x 130 μ Copper Area)	35 °C/W							
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C							

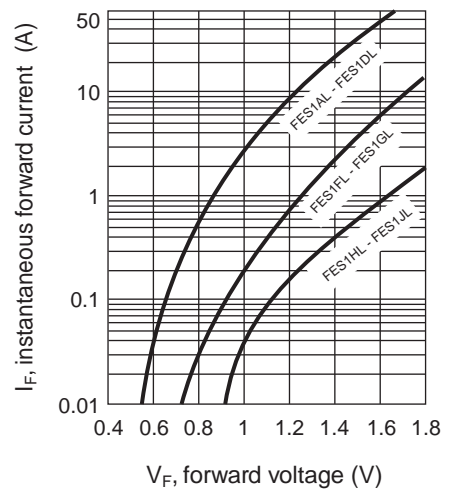
Note: EALYM: E=1A, A=50V, L-LOW Profile, Y-Year Code, M-Month Code

Rating And Characteristic Curves

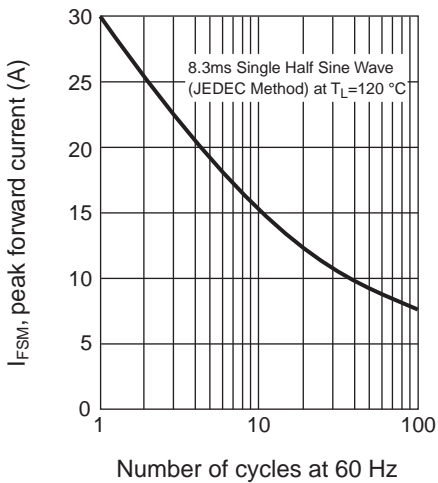
MAXIMUM FORWARD CURRENT DERATING CURVE



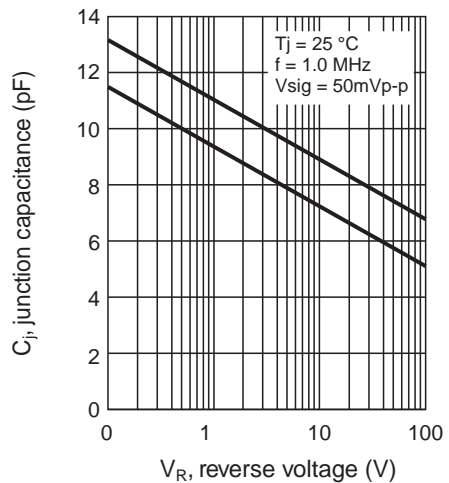
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



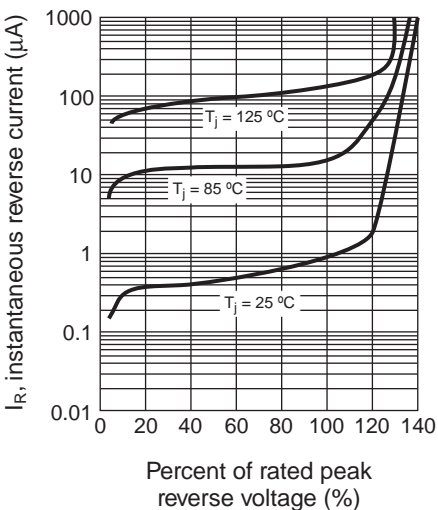
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



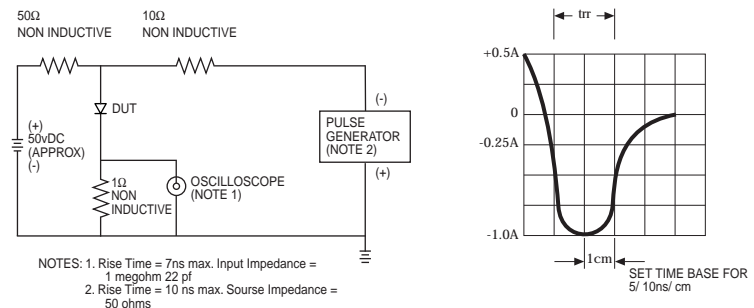
TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTICS



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm 22 pF
2. Rise Time = 10 ns max. Source Impedance = 50 ohms