



FRS1A FRS1M

1 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

Dimensions in mm. CASE: SMA/DO-214AC Week code Year code Type No. Closs Standard soldering pad	Voltage 50 to 1000 V Current 1.0 A HYPERECTIFIER® • 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 MECHANICAL DATA Terminals: Solder plated, solderable per IEC 68-2-20. Standard Packaging: 4 mm. tape (EIA-RS-481). Weight: 0.064 g.
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Maximum Ratings and Electrical Characteristics at 25 °C

		FRS1A	FRS1B	FRS1D	FRS1G	FRS1J	FRS1K	FRS1M
Marking Code		F1	F2	F3	F4	F5	F6	F7
V _{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000
V _{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700
V _{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000
I _{F(AV)}	Forward current at T _L = 95 °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	1.3 V						
I _R	Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 125 °C	5μ A 50μ A						
t _{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 ns				250 ns	500 ns	
C _j	Typical Junction Capacitance (1MHz; -4V)	8 pF						
R _{th (j-l)} R _{th (j-a)}	Typical Thermal Resistance (5x5 mm² 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						

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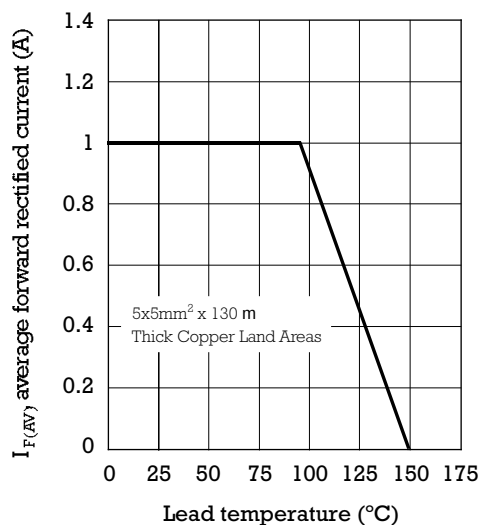
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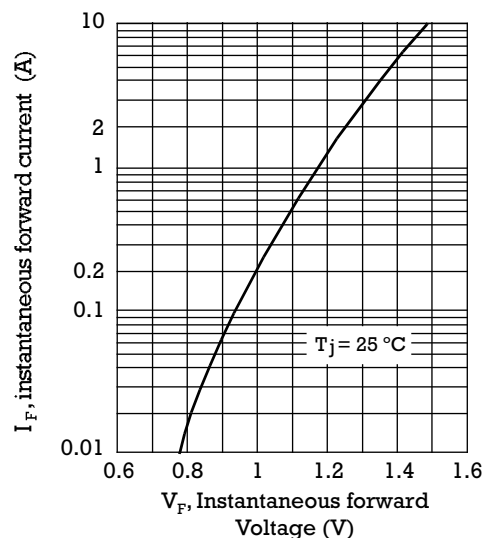
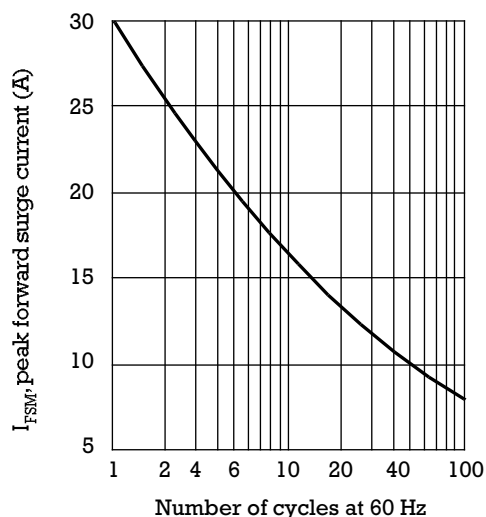
FRS1

Rating And Characteristic Curves

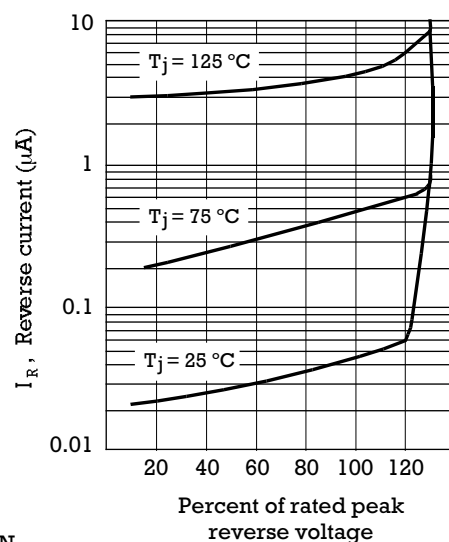
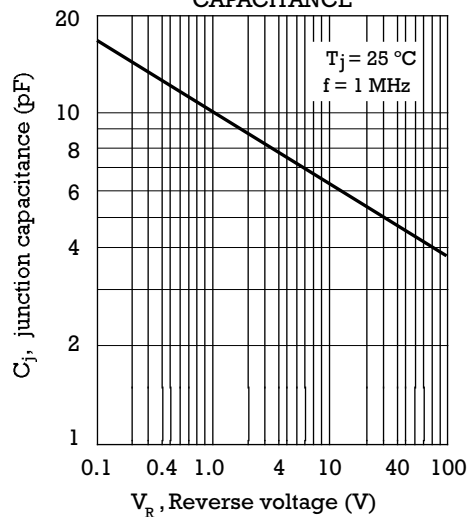
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC

MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT

TYPICAL REVERSE CHARACTERISTIC

TYPICAL JUNCTION
CAPACITANCE

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