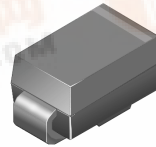




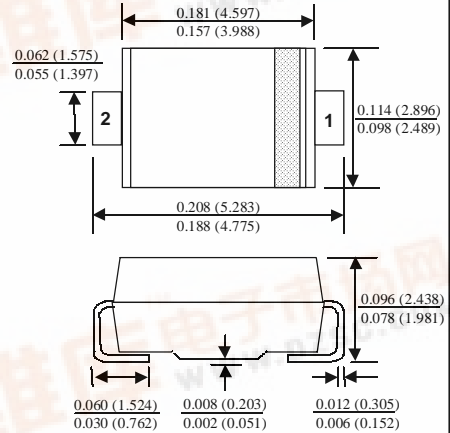
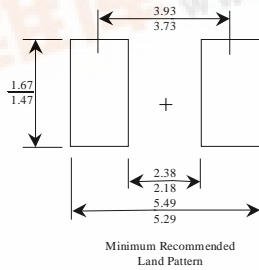
RGF1A - RGF1M

Features

- Glass passivated junction.
- For surface mounted application.
- Low forward voltage drop.
- High current capability.
- Easy pick and place.
- High surge current capability.



SMA/DO-214AC
COLOR BAND DENOTES CATHODE



1.0 Ampere Fast Recovery Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I _O	Average Rectified Current @ T _L = 125°C	1.0	A
i _{f(surge)}	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	30	A
P _D	Total Device Dissipation Derate above 25°C	1.76 11.7	W mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient **	85	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead**	28	°C/W
T _{stg}	Storage Temperature Range	-65 to +175	°C
T _J	Operating Junction Temperature	-65 to +175	°C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

** Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics

T_A = 25°C unless otherwise noted

Parameter	Device							Units	
	1A	1B	1D	1G	1J	1K	1M		
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V	
Maximum Reverse Current @ rated V _R T _A = 25°C T _A = 125°C								5.0 100	μA μA
Maximum Forward Voltage @ 1.0 A								1.3	V
Maximum Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A	150				250	500		nS	
Typical Junction Capacitance V _R = 4.0 V, f = 1.0 MHz	8.5							pF	



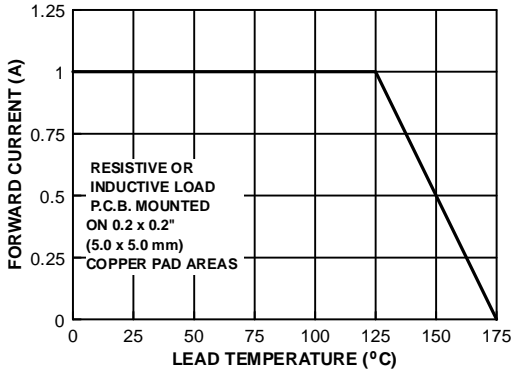
Fast Recovery Rectifiers

(continued)

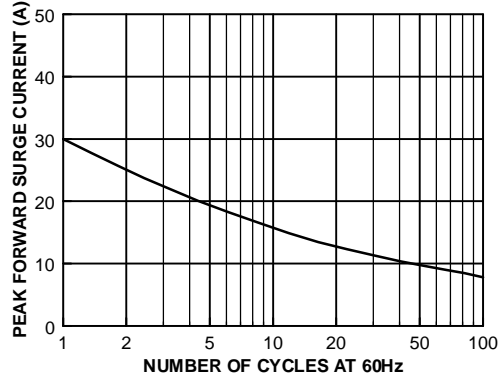
RGF1A-RGF1M

Typical Characteristics

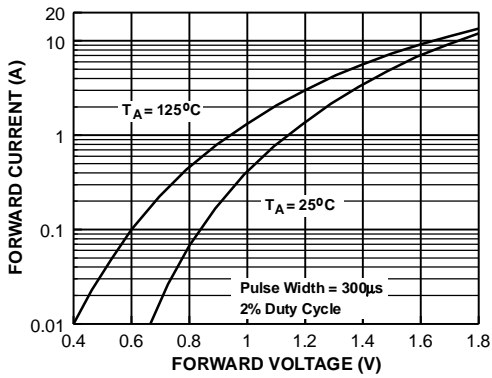
Forward Current Derating Curve



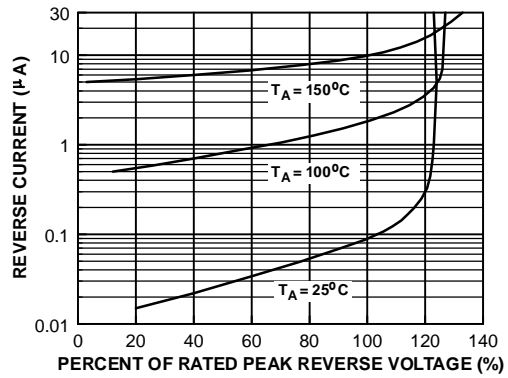
Non-Repetitive Surge Current



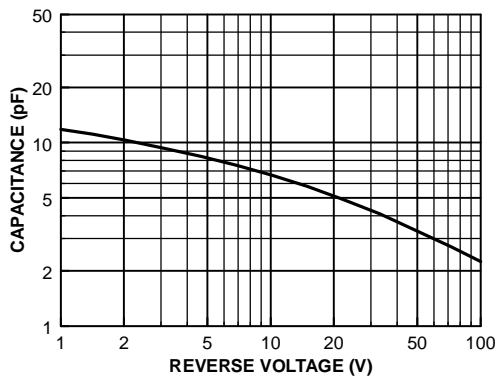
Forward Characteristics



Reverse Characteristics



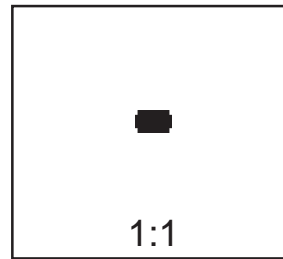
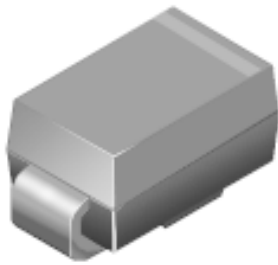
Junction Capacitance



SMA/DO-214AC Package Dimensions



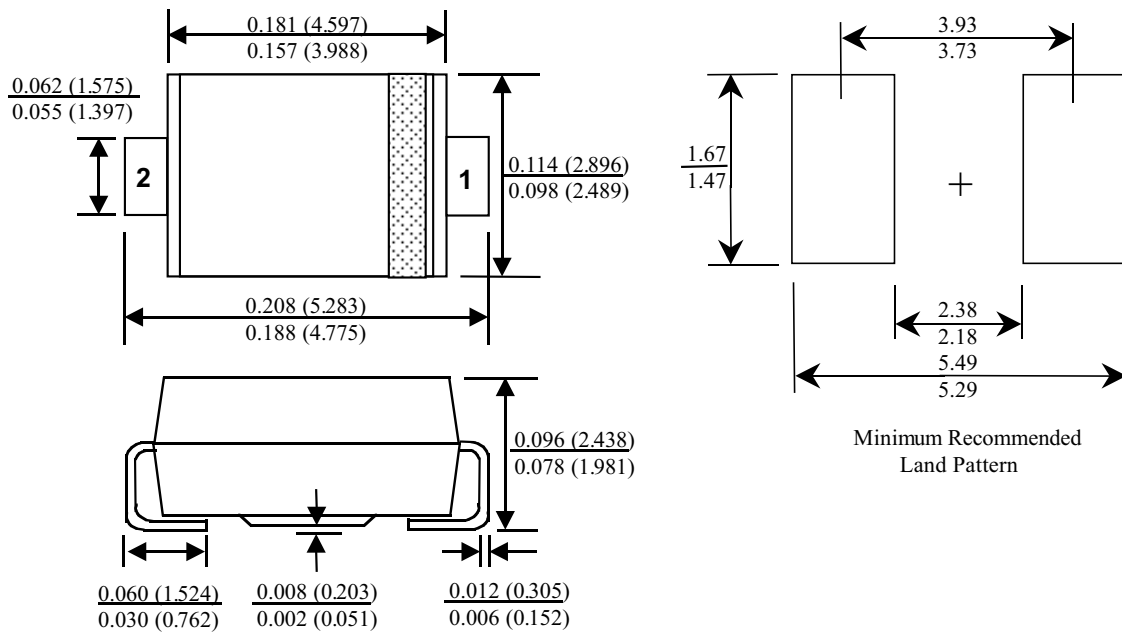
SMA/DO-214AC (FS PKG Code P5)



Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 0.064



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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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