

RS1005FL THRU RS1010FL



1.0 Amp Fast Recovery Rectifier

Features

- For Surface Mount Application
- Case Material : Molded Palstic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Glass Passivated Junction
- Fast Recovery Time For High Efficiency
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature(T_J): -65°C to +150°C
- Storage Temperature(T_{STG}): -65°C to +150°C
- Maximum Thermal Resistance(R_{thJA}): 75°C/W*

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RS10005FL	F1	50V	35V	50V
RS1001FL	F2	100V	70V	100V
RS1002FL	F3	200V	140V	200V
RS1004FL	F4	400V	280V	400V
RS1006FL	F5	600V	420V	600V
RS1008FL	F6	800V	560V	800V
RS1010FL	F7	1000V	700V	1000V

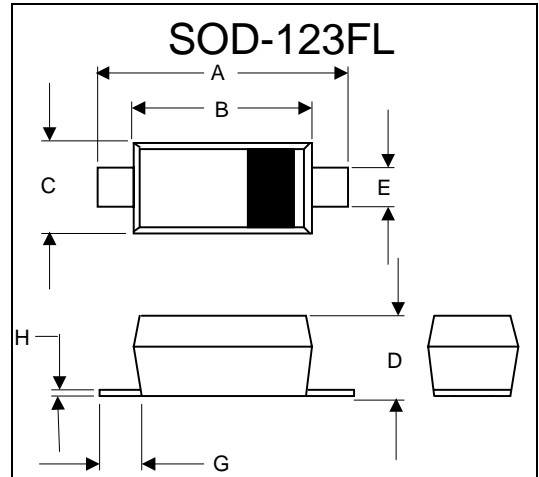
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0 A	T _L = 110°C
Peak Forward Surge Current	I _{FSM}	30.0A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V _F	1.3V	I _{FM} = 1.0A; T _A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	2.0µA 50uA	T _A = 25°C T _A = 125°C
Maximum Reverse Recovery Time RS10005FL-04FL RS1006FL RS1008FL-10FL	T _{rr}	150ns 250ns 500ns	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A
Typical Junction Capacitance	C _J	10pF	Measured at 1.0MHz, V _R = 4.0V

*6.0mm² copper pads to each terminal

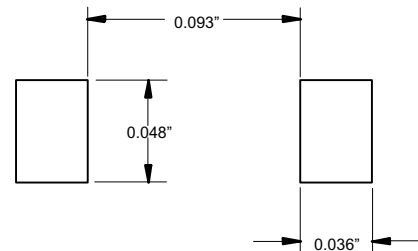
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

1.0 Amp Fast Recovery Rectifier 50 to 1000 Volts



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	-----	.20	

SUGGESTED SOLDER PAD LAYOUT



RS10005FL-RS1010FL

Figure 1
Typical Reverse Characteristics

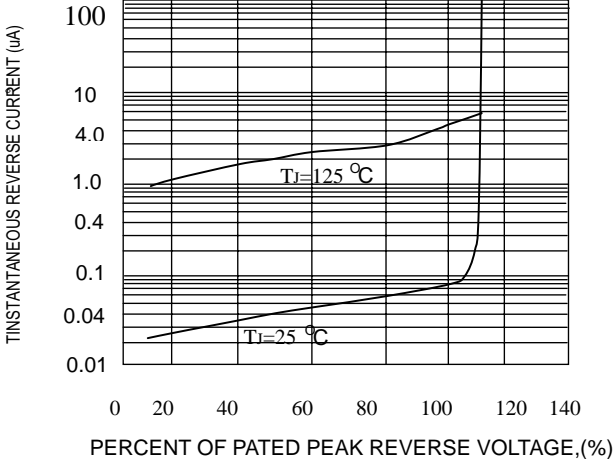


Figure 2
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

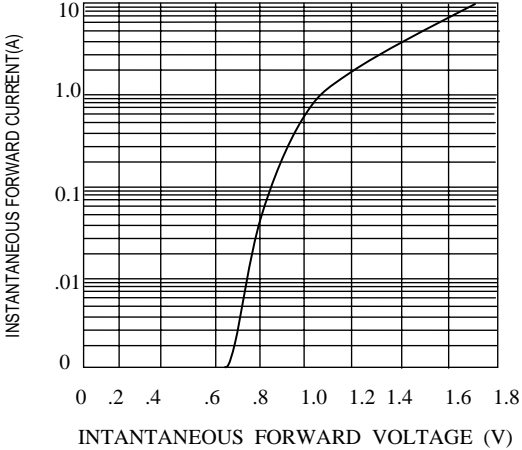


Figure 3
NON-REPETITIVE FORWARD SURGE CURRENT

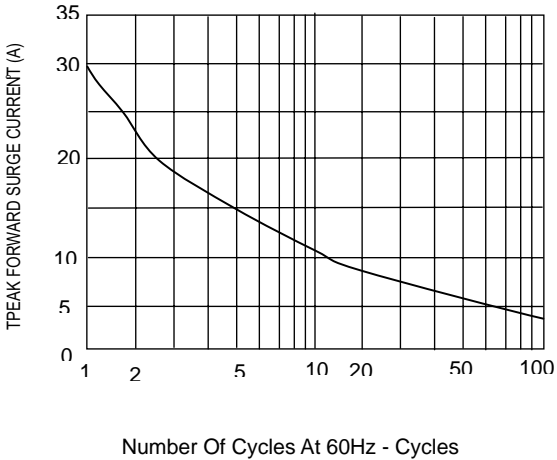


Figure 4
TYPICAL CAPACITANCE

