

™

# FS2A-LT THRU FS2M-LT

## Features

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Higher Temp Soldering: 260°C for 10 Seconds At Terminals
- Available on Tape and Reel

## Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FS2A-LT	FS2A	50V	35V	50V
FS2B-LT	FS2B	100V	70V	100V
FS2D-LT	FS2D	200V	140V	200V
FS2G-LT	FS2G	400V	280V	400V
FS2J-LT	FS2J	600V	420V	600V
FS2K-LT	FS2K	800V	560V	800V
FS2M-LT	FS2M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_J=90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.30V	$I_{FM}=2.0A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA	$T_J=25^\circ\text{C}$
Maximum Reverse Recovery Times FR2A-LT-2G-LT FR2J-LT FR2K-LT-2M-LT	$t_{rr}$	150ns 250ns 500ns	$I_F=0.5A$ , $I_R=1.0A$ , $I_{rr}=0.25A$
Typical Junction Capacitance	$C_j$	50pF	Measured at 1.0MHz, $V_R=4.0V$

Pulse test: Pulse width 300 usec, duty cycle 2%.

## 2.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

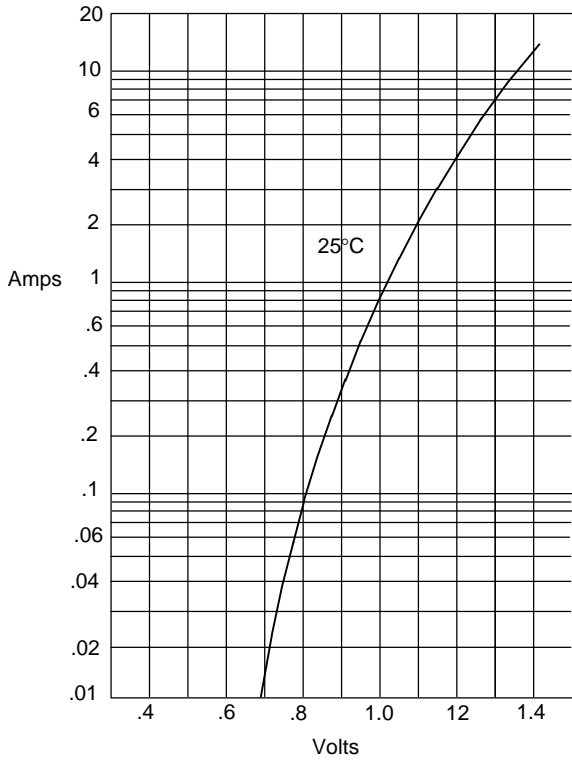
**DO-214AC  
(SMA) (LEAD FRAME)**

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.096	2.00	2.44	
B	.050	.064	1.27	1.63	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.030	.060	.76	1.52	
F	.065	.091	1.65	2.32	
G	.189	.220	4.80	5.59	
H	.157	.181	4.00	4.60	
J	.090	.115	2.25	2.92	

**SUGGESTED SOLDER PAD LAYOUT**

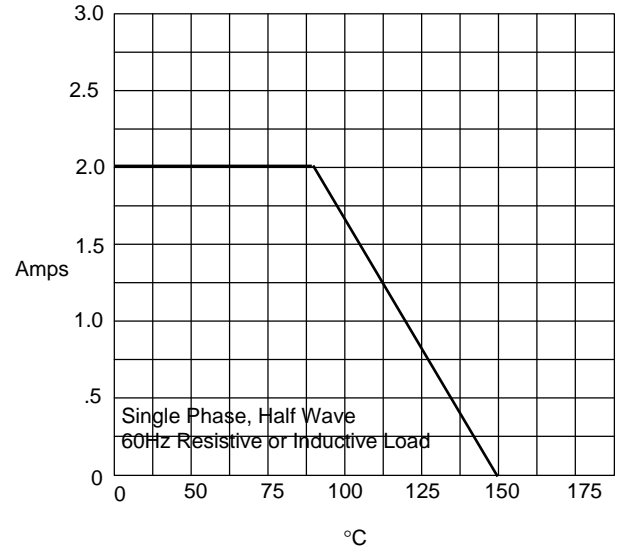
# FS2A-LT thru FS2M-LT

Figure 1  
Typical Forward Characteristics



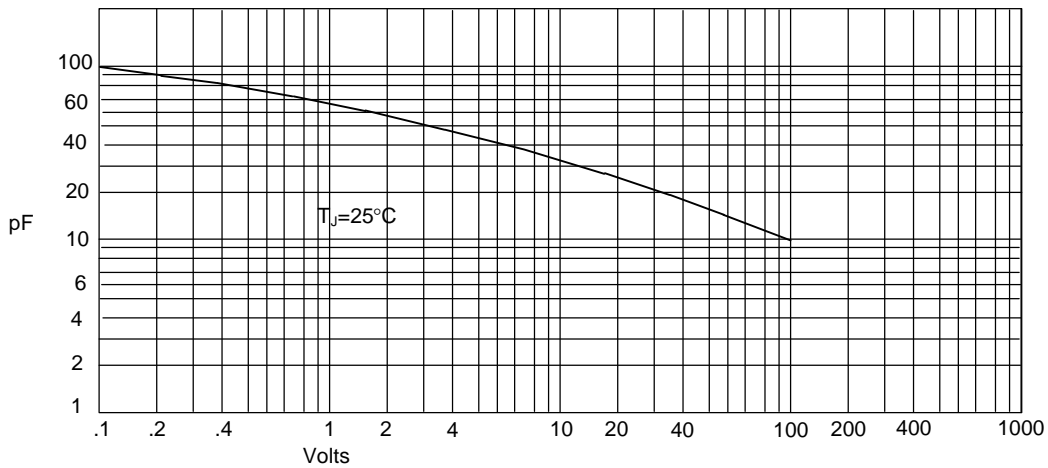
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

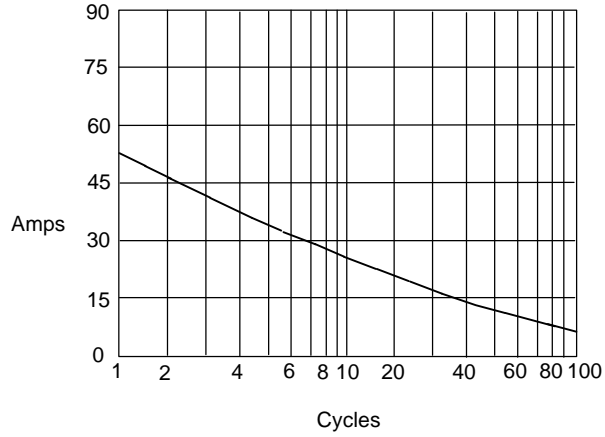
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

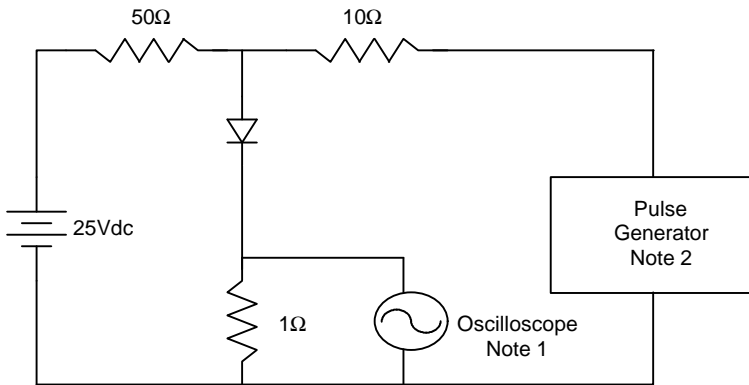
# FS2A-LT thru FS2M-LT

Figure 4  
Maximum Non-Repetitive Forward Surge Current

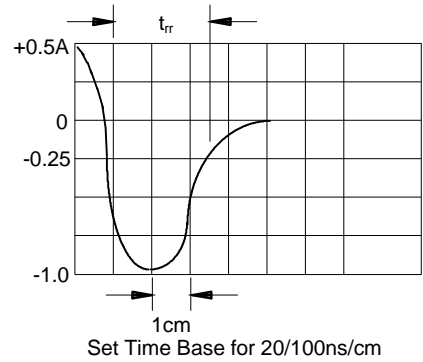


Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles

Figure 5  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
  2. Rise Time = 10ns max.  
Source impedance = 50 ohms
  3. Resistors are non-inductive



■

■

■

■

---