

Features

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Superfast Recovery Times For High Efficiency
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

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

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

Electrical Characteristics @ 25°C Unless Otherwise Specified

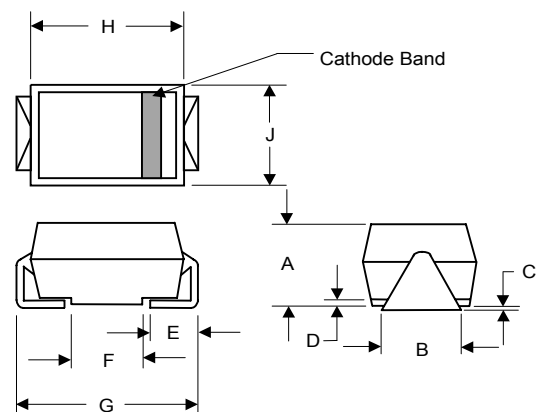
Average Forward Current	$I_{F(AV)}$	2.0A	$T_J=90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms half sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	$I_{FM}=2.0A$ $T_A=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0uA	$T_J=25^\circ\text{C}$
Maximum Reverse Recovery Times FS2A-2G FS2J FS2K-2M	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%.

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

2.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

DO-214AC (HSMA) (High Profile)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.067	.089	1.70	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.055	.89	1.40	
F	.065	.096	1.65	2.45	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	

SUGGESTED SOLDER PAD LAYOUT

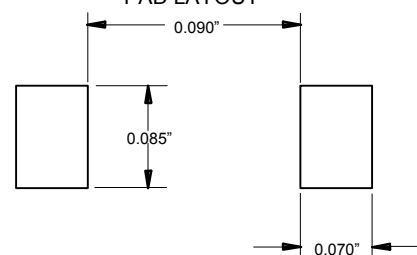
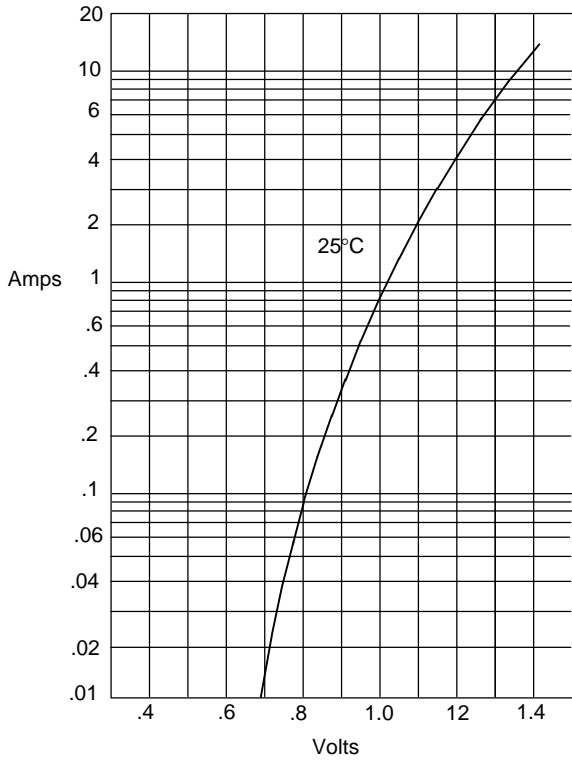
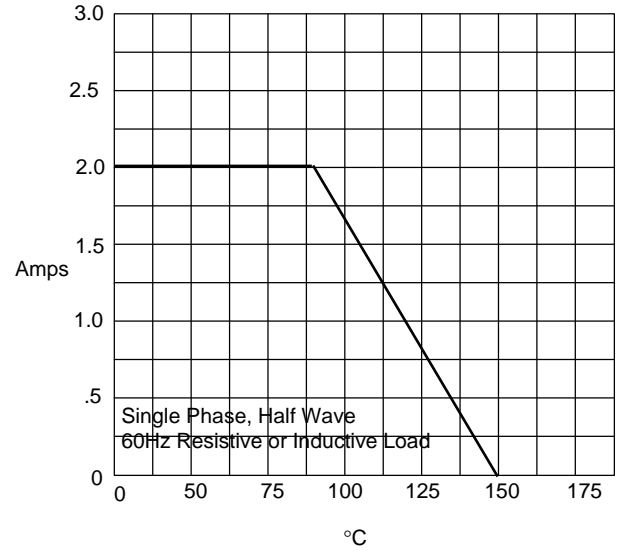


Figure 1
Typical Forward Characteristics



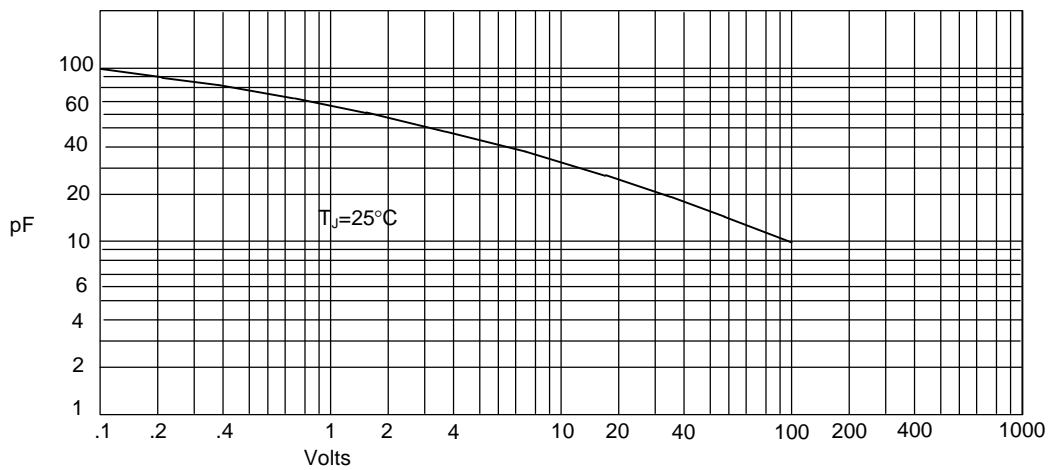
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



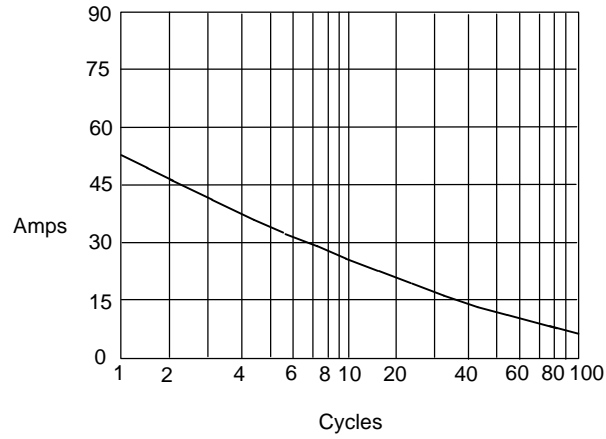
Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Junction Capacitance



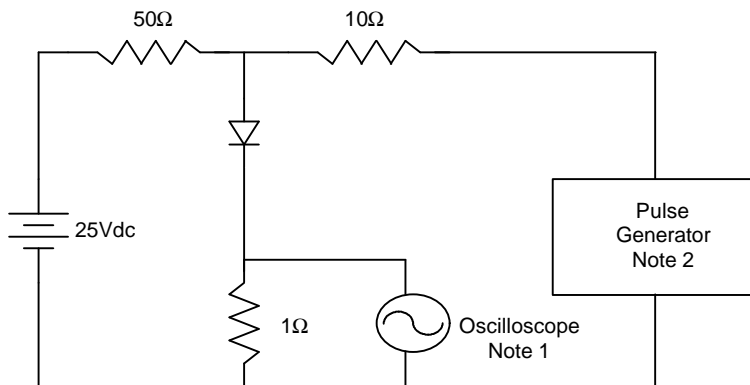
Junction Capacitance - pF versus
Reverse Voltage - Volts

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

