

## Features

- Halogen Free. "Green" Device (Note 1)
- High Current Capability
- Low Profile Package
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value							Unit
		SS 22FL	SS 23FL	SS 24FL	SS 25FL	SS 26FL	SS 28FL	SS 210FL	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>								
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	40	50	60	80	100	V
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Average Rectified Forward Current	I <sub>F(AV)</sub>	2							A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I <sub>FSM</sub>	50							A
Current Squared Time @1ms≤t≤8.3ms	I <sup>2</sup> t	10.375							A <sup>2</sup> s

## Marking code

Part Number	Marking Code
SS22FL	SS22
SS23FL	SS23
SS24FL	SS24
SS25FL	SS25
SS26FL	SS26
SS28FL	SS28
SS210FL	SS210

## Internal Structure

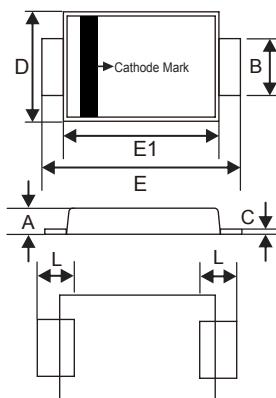
Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode		
2	Anode		XXXX = Marking code

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High temperature solder exemption applied, see EU directive annex 7a.

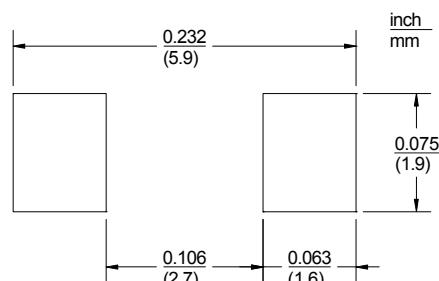
&Amp  
Gi fZUMY'Aci bh  
GW ch\_mF YWIZYf  
&0 to 100 Volts

DO-221AC(SMA-FL)



DIM	DIMENSIONS				NOTE	
	INCHES		MM			
	MIN	MAX	MIN	MAX		
A	0.035	0.049	0.90	1.25		
B	0.049	0.065	1.25	1.65		
C	0.004	0.016	0.10	0.40		
D	0.089	0.116	2.25	2.95		
E	0.173	0.220	4.40	5.60		
E1	0.126	0.181	3.20	4.60		
L	0.020	0.059	0.50	1.50		

Suggested Solder Pad Layout



## Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T <sub>J</sub>	Operating Junction Temperature Range	SS22FL~SS24FL	-55		125	°C
T <sub>J</sub>	Operating Junction Temperature Range	SS25FL~SS210FL	-55		150	°C
T <sub>stg</sub>	Storage Temperature Range		-55		150	°C
R <sub>th(J-L)</sub>	Thermal Resistance from Junction to Lead	Note 1		18		°C/W
R <sub>th(J-A)</sub>	Thermal Resistance from Junction to Ambient	Note 1		70		°C/W

Note:

1. Mounted on P.C.B. with 8mm\*8mm copper pad areas.

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage SS22FL~SS24FL SS25FL~SS26FL SS28FL~SS210FL	V <sub>F</sub>	I <sub>F</sub> =2A;T <sub>J</sub> =25°C			0.50 0.70 0.85	V
Reverse Current SS22FL~SS26FL SS28FL~SS210FL	I <sub>R</sub>	at Rated V <sub>R</sub> ;T <sub>J</sub> =25°C at Rated V <sub>R</sub> ;T <sub>J</sub> =125°C at Rated V <sub>R</sub> ;T <sub>J</sub> =25°C at Rated V <sub>R</sub> ;T <sub>J</sub> =125°C			0.1 20 0.01 5	mA
Junction Capacitance SS22FL~SS24FL SS25FL~SS26FL SS28FL~SS210FL	C <sub>J</sub>	V <sub>R</sub> =4V;f=1MHz;T <sub>J</sub> =25°C		125 90 60		pF

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

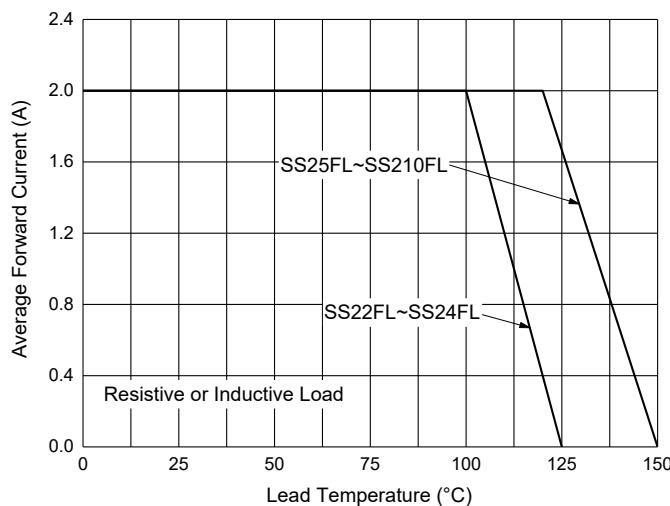


Fig. 3 - Typical Forward Characteristics

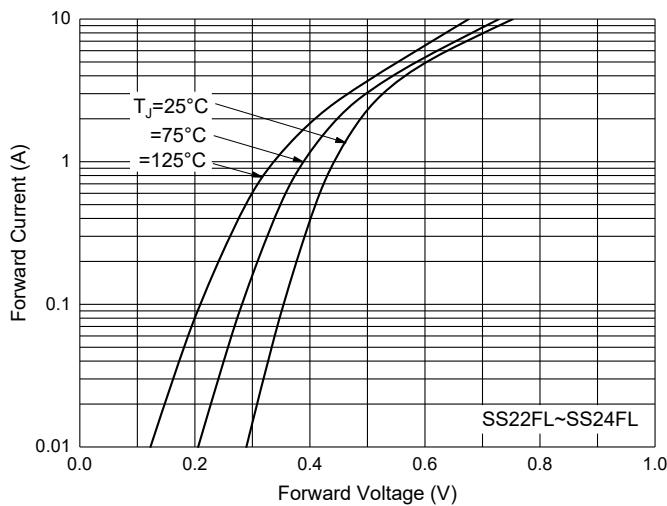


Fig. 5 - Typical Forward Characteristics

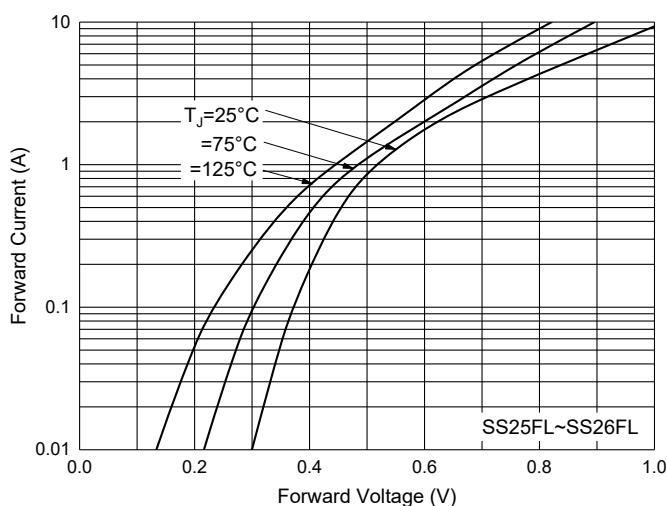


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

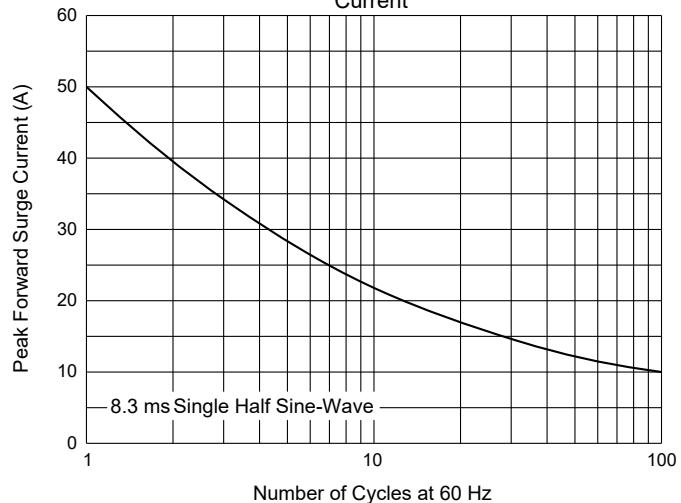


Fig. 4 - Typical Reverse Leakage Characteristics

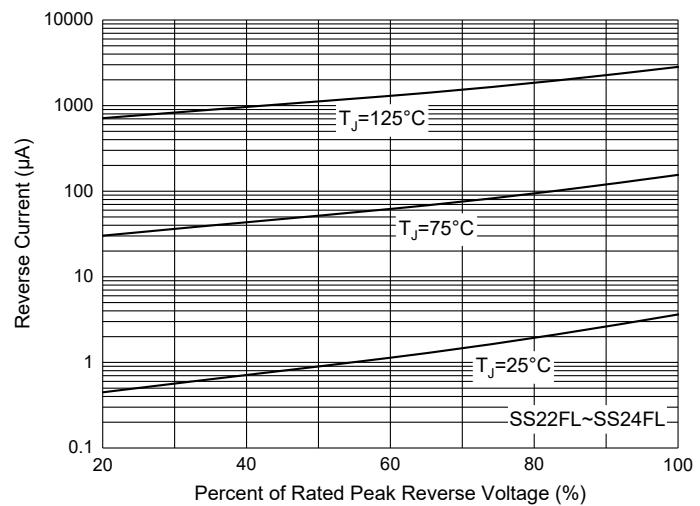
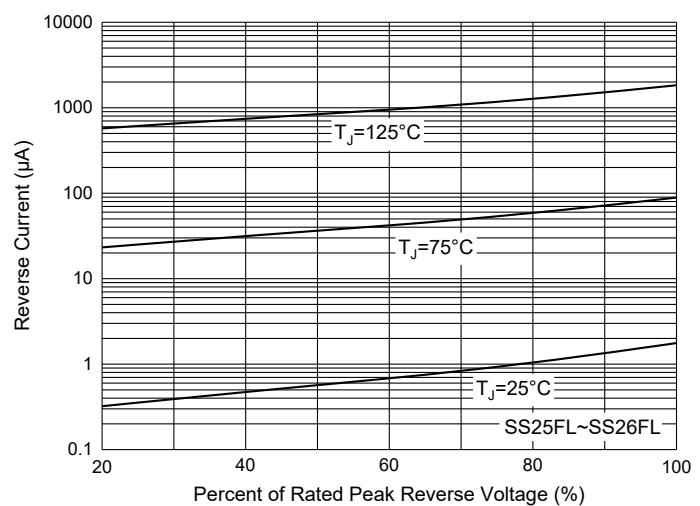


Fig. 6 - Typical Reverse Leakage Characteristics



## Curve Characteristics

Fig. 7 - Typical Forward Characteristics

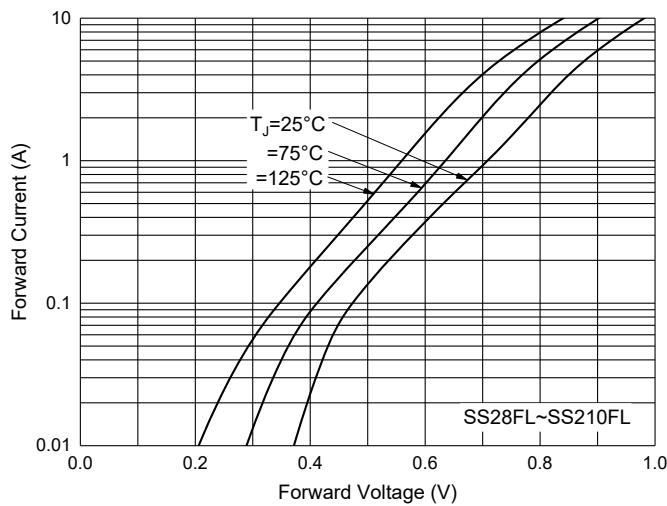


Fig. 8 - Typical Reverse Leakage Characteristics

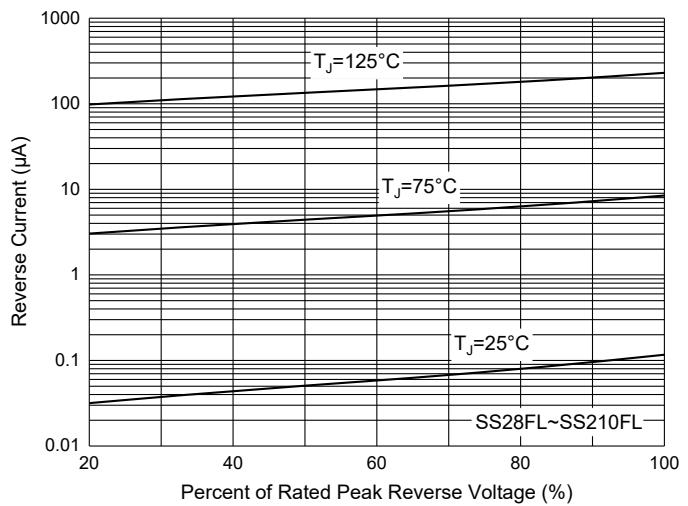
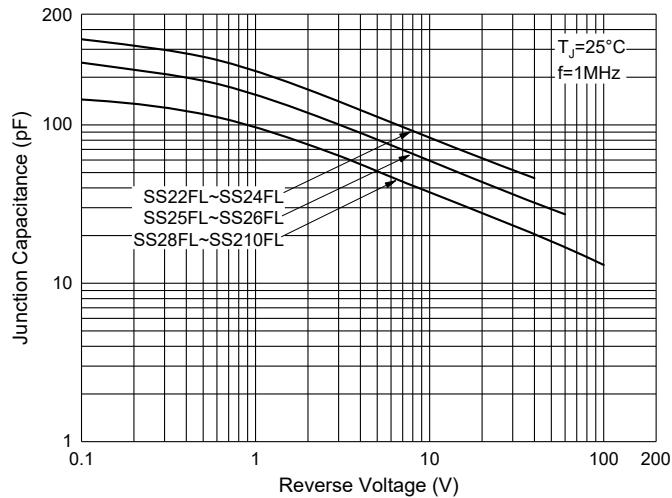


Fig. 9 - Typical Capacitance Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:10Kpcs/Reel

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