

## **Features**

- Halogen Free. "Green" Device (Note 1)
- Fully Automotive Qualified to AEC-Q101
- Low Profile Package
- High Surge Capability
- 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)

		Value		
Parameter	Symbol	SS24FLQ	SS26FLQ	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>			
Working Peak Reverse Voltage	V <sub>RWM</sub>	40	60	V
DC Blocking Voltage	V <sub>R</sub>			
RMS Reverse Voltage	V <sub>RMS</sub>	28	42	V
Average Rectified Forward Current @ T <sub>L</sub> =120°C	I <sub>F(AV)</sub>	2	2	А
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I <sub>FSM</sub>	75		А
Current Squared Time @ 1ms≤t≤8.3ms	l <sup>2</sup> t	23	3.34	A <sup>2</sup> s

## **Marking Code**

Part Number	Marking Code
SS24FLQ	SS24
SS26FLQ	SS26

## **Internal Structure**

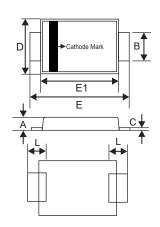
Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	MCC XXXX 2	
2	Anode	XXXX = Marking Code	1 00 2
		XXXX = Marking Code YYWW = Date Code	

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.

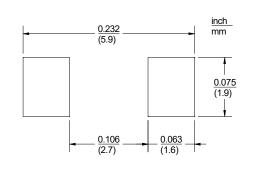
# 2 Amp Surface Mount Schottky Rectifier 40 to 60 Volts

# DO-221AC(SMA-FL)



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.035	0.049	0.90	1.25	
В	0.049	0.065	1.25	1.65	
С	0.004	0.016	0.10	0.40	
D	0.089	0.116	2.25	2.95	
Е	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	Тур	Max	Unit
T <sub>J</sub>	Operating Junction Temperature Range		-55		150	°C
T <sub>stg</sub>	Storage Temperature Range		-55		150	°C
Rth <sub>(J-L)</sub>	Thermal Resistance from Junction to Lead	Note 1		20		°C/W
Rth <sub>(J-A)</sub>	Thermal Resistance from Junction to Ambient	Note 1		70		°C/W

#### Note:

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage						
SS24FLQ	V <sub>F</sub>	I <sub>F</sub> =2A;T <sub>J</sub> =25°C		0.50	0.55	
		I <sub>F</sub> =2A;T <sub>J</sub> =125°C		0.42	0.45	V
SS26FLQ		$I_F=2A;T_J=25^{\circ}C$		0.58	0.70	
		I <sub>F</sub> =2A;T <sub>J</sub> =125°C		0.54	0.63	
Reverse Current						
SS24FLQ	I <sub>R</sub>	at Rated V <sub>R</sub> ;T <sub>J</sub> =25°C			0.1	
		at Rated V <sub>R</sub> ;T <sub>J</sub> =125°C			10	mA
SS26FLC		at Rated V <sub>R</sub> ;T <sub>J</sub> =25°C			0.1	1110
		at Rated V <sub>R</sub> ;T <sub>J</sub> =125°C			10	
Junction Capacitance						
SS24FLQ	CJ	V <sub>R</sub> =4V;f=1MHz;T <sub>J</sub> =25°C		115		pF
SS26FLQ	- 0	, , , , ,		95		•

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<sup>1.</sup>Mounted on P.C.B. with 8 mm x 8 mm copper pad areas.

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## **Curve Characteristics**

Fig. 1 - Forward Current Derating Curve 2.4 2.0 Average Forward Current (A) 1.6 1.2 0.8 0.4 Resistive or Inductive Load 0.0 0 25 75 100 50 125 150 Lead Temperature (°C)

Fig. 3 - Typical Forward Characteristics

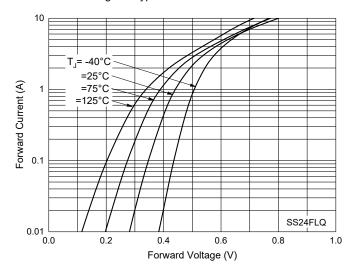


Fig. 5 - Typical Forward Characteristics

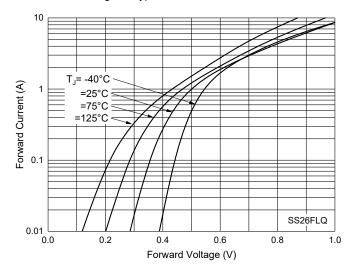


Fig. 4 - Typical Reverse Leakage Characteristics

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Number of Cycles at 60 Hz

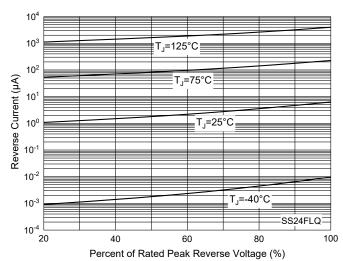
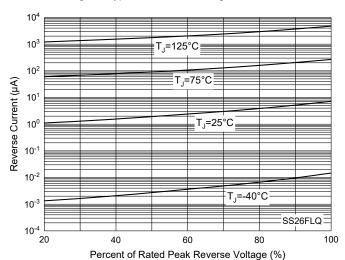
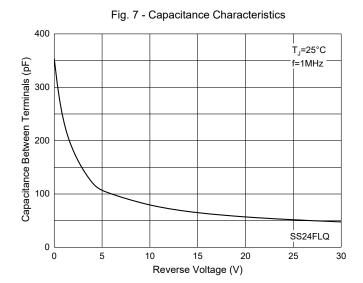


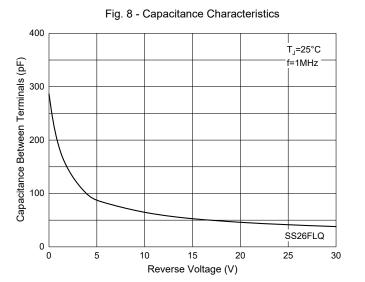
Fig. 6 - Typical Reverse Leakage Characteristics





## **Curve Characteristics**







## **Ordering Information**

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

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