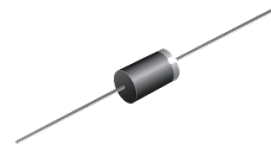


## FEATURES

- | Glass passivated junction chip
- | Low reverse leakage
- | High forward surge current capability



DO-201



Schematic Symbol

## MECHANICAL DATA

- | Case : Molded plastic body
- | Polarity : Polarity symbol marking on body
- | Mounting Position : Any

## APPROVALS

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003

## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter		Symbol	SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G	SF59G	Unit
Marking			SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G	SF59G	
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	50	100	150	200	300	400	500	600	800	V
Maximum RMS Voltage		V <sub>RMS</sub>	35	70	105	140	210	280	350	420	560	
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	150	200	300	400	500	600	800	
Maximum Average Forward Rectified Current at T <sub>L</sub> =100°C		I <sub>F(AV)</sub>	5.0									A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed On Rated Load		I <sub>FSM</sub>	150.0									
Maximum Instantaneous Forward Voltage at 5.0A		V <sub>F</sub>	1.0				1.3		1.7		2.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	5.0									μA
	T <sub>A</sub> =125°C		500									
Maximum Reverse Recovery Time (Note1)		T <sub>rr</sub>	35									ns
Typical Junction Capacitance (Note2)		C <sub>J</sub>	78.0									pF
Typical Thermal Resistance		R <sub>θJA</sub>	45.0									°C/W
Operating Junction And Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-55~+150									°C

Note:

- 1.Reverse Recovery Time Test Condition: I<sub>F</sub>=0.5A I<sub>R</sub>=1.0A I<sub>rr</sub>=0.25A
- 2.Measured at 1MHz And Applied Reverse Voltage of 4.0V D.C.

# CHARACTERISTIC CURVES

Fig.1 Derating Curve Output Rectified Current

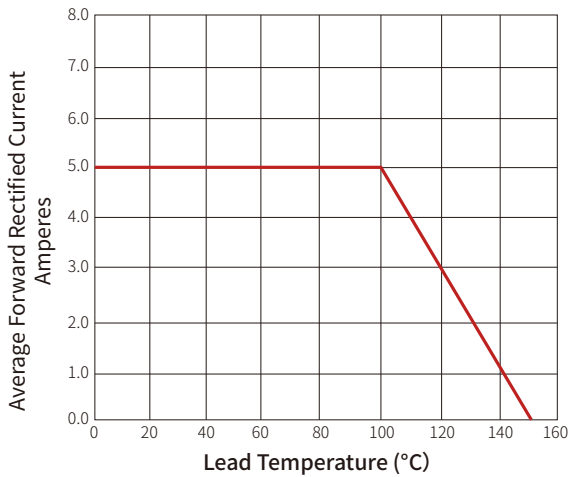


Fig.2 Maximum Non-repetitive Peak Forward Surge Current Perleg

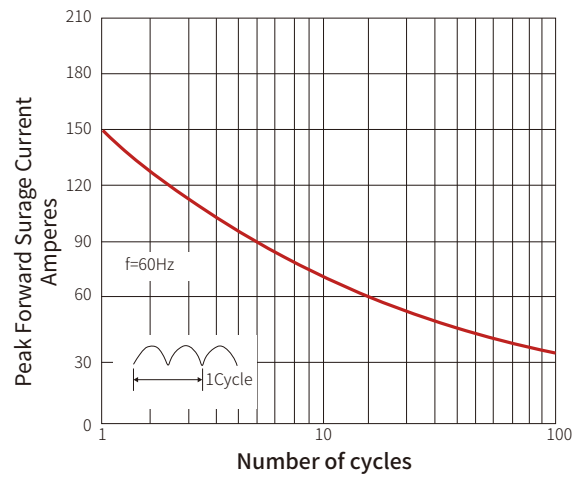


Fig.3 Typical Forward Voltage Characteristics

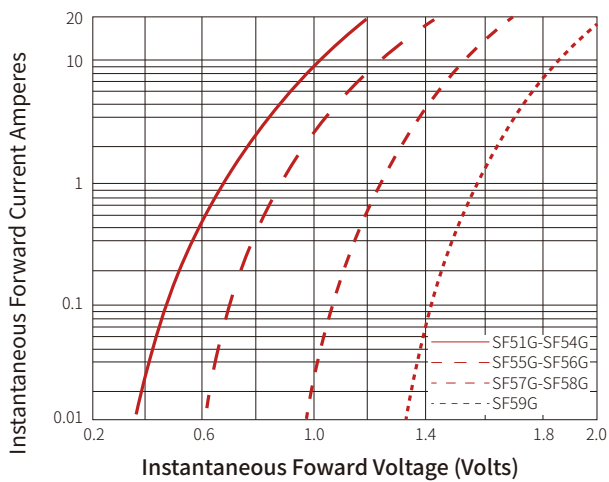
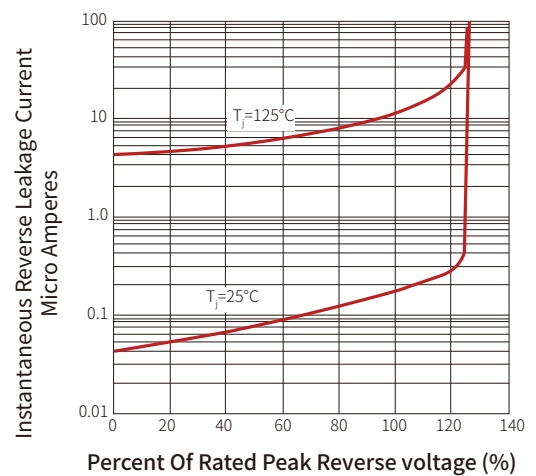
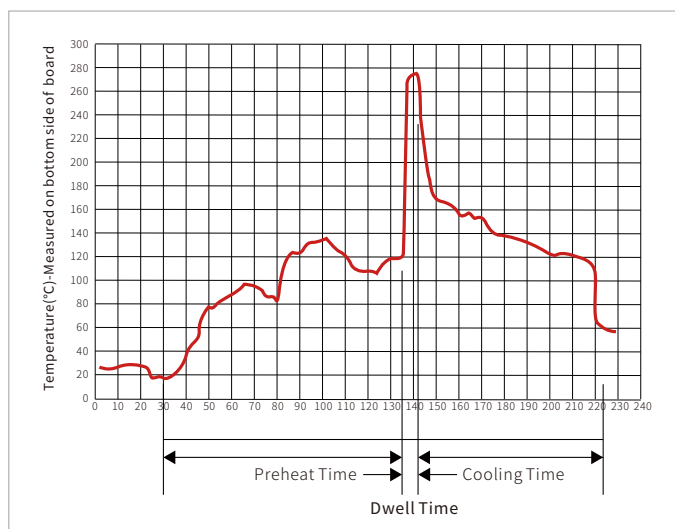


Fig.4 Typical Reverse Leakage Characteristics

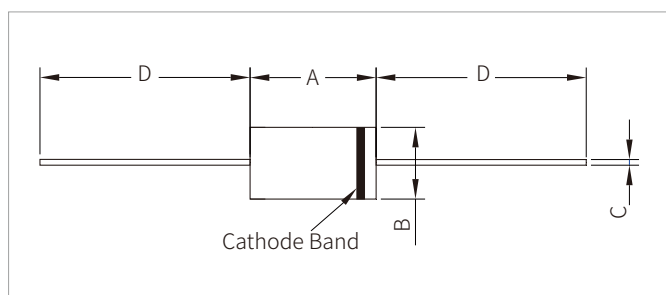


## WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

## DO-201 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	8.50	9.50	0.335	0.375
B	4.80	5.60	0.189	0.220
C	1.10	1.45	0.043	0.057
D	24.00	-	0.945	-

## ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
SF51G-SF59G	DO-201	1250pcs	Reel

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