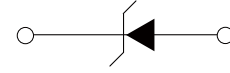


FEATURES

- | 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

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

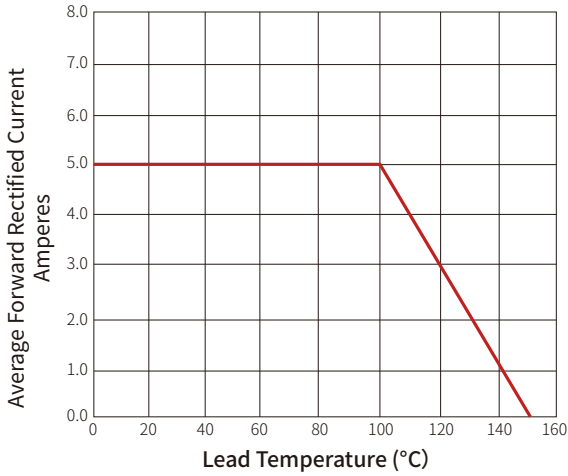
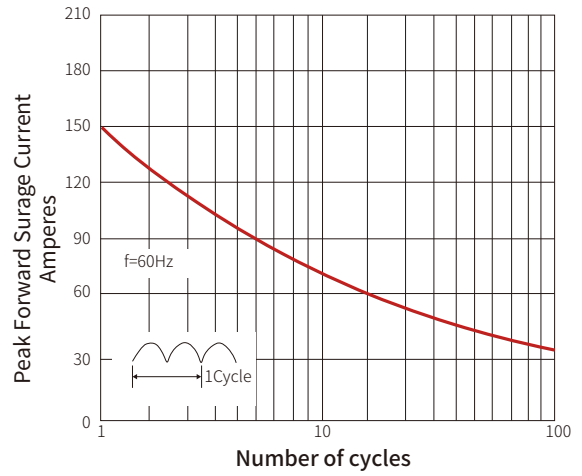
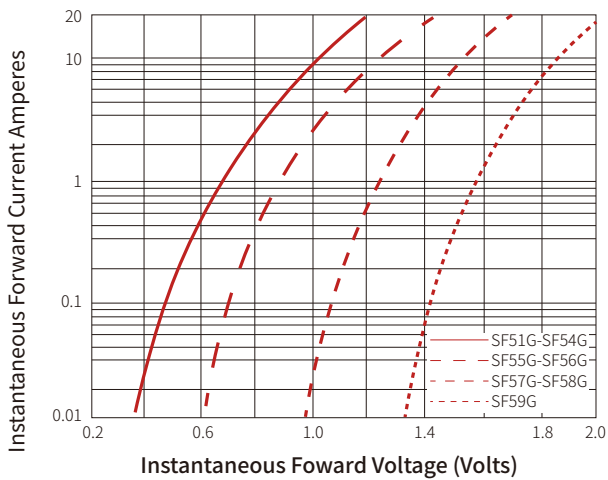
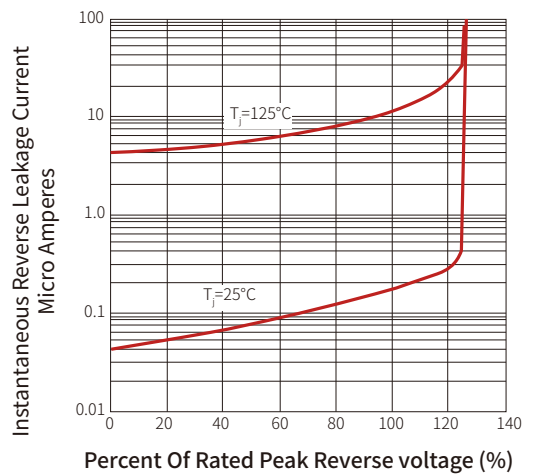
MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

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 _{RRM}	50	100	150	200	300	400	500	600	800	
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	800	
Maximum Average Forward Rectified Current at T _L =100°C	I _{F(AV)}	5.0									A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	150.0									
Maximum Instantaneous Forward Voltage at 5.0A	V _F		1.0			1.3		1.7		2.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	5.0									μA
	T _A =125°C	500									
Maximum Reverse Recovery Time (Note1)	T _{rr}	35									ns
Typical Junction Capacitance (Note2)	C _J	78.0									pF
Typical Thermal Resistance	R _{θJA}	45.0									°C/W
Operating Junction And Storage Temperature Range	T _J , T _{STG}	-55~+150									°C

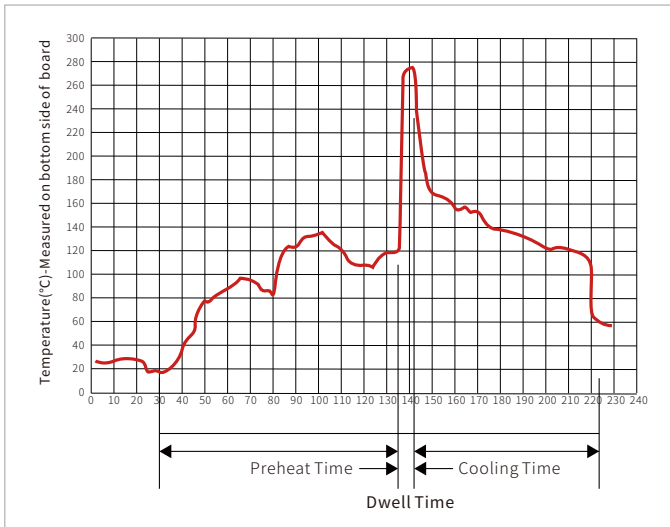
Note:

- 1.Reverse Recovery Time Test Condition: I_F=0.5A I_R=1.0A I_{rr}=0.25A
- 2.Measured at 1MHz And Applied Reverse Voltage of 4.0V D.C.

CHARACTERISTIC CURVES

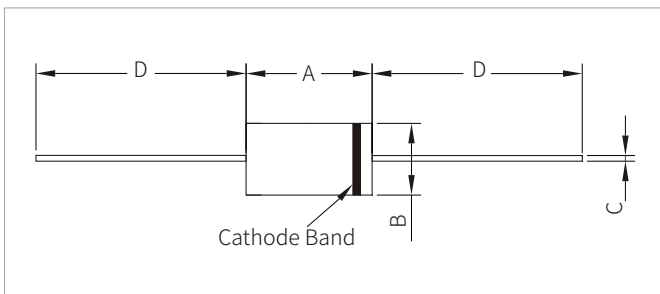
Fig.1 Derating Curve Output Rectified Current

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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