

## FEATURES

- | The plastic package carries Underwriters Laboratory  
Flammability Classification 94V-0

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- | Guardring for overvoltage protection

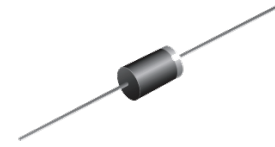
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- | Low reverse leakage

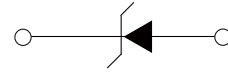
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- | High forward surge current capability

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DO-201



Schematic Symbol

## APPLICATIONS

- | Case : Molded plastic body

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- | Polarity : Polarity symbol marking on body

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- | Mounting Position : Any

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## APPROVALS

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

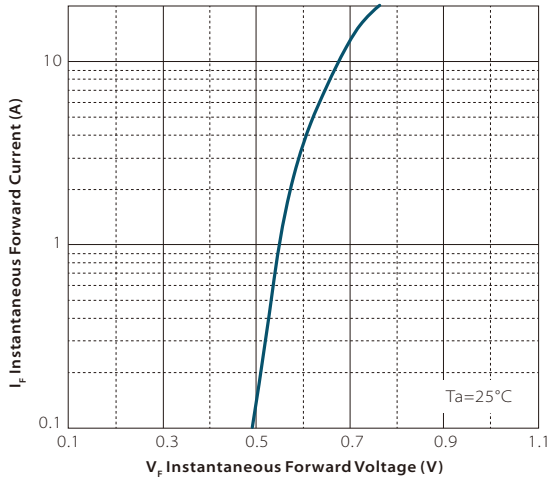
## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

Parameter	Symbol	Value	Unit	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	V	
Maximum RMS voltage	V <sub>R(RMS)</sub>	70	V	
Maximum DC blocking voltage	V <sub>DC</sub>	100	V	
Maximum average forward rectified current	I <sub>F(AV)</sub>	5.0	A	
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I <sub>FSM</sub>	125	A	
Maximum forward voltage @I <sub>F</sub> =5.0A	V <sub>F</sub>	0.65	V	
Typical thermal resistance (Note 1)	R <sub>θJA</sub>	54	°C/W	
Maximum reverse current @V <sub>DC</sub>	I <sub>R</sub>	T <sub>A</sub> =25°C	0.1	mA
		T <sub>A</sub> =100°C	10	mA
Type junction capacitance V <sub>R</sub> =4.0V,f=1MHz	C <sub>J</sub>	320	pF	
Operating junction temperature	T <sub>J</sub>	-55 to +125	°C	
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C	

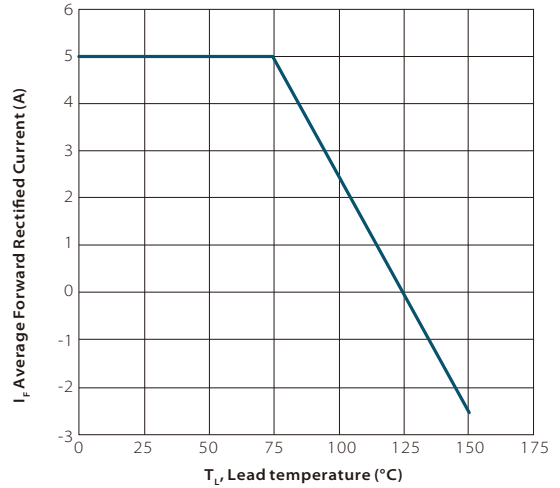
Note:1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

# CHARACTERISTIC CURVES

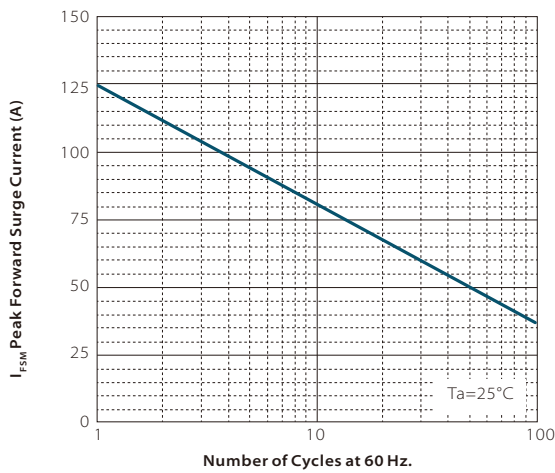
**Fig. 1- Typical Forward Characteristic**



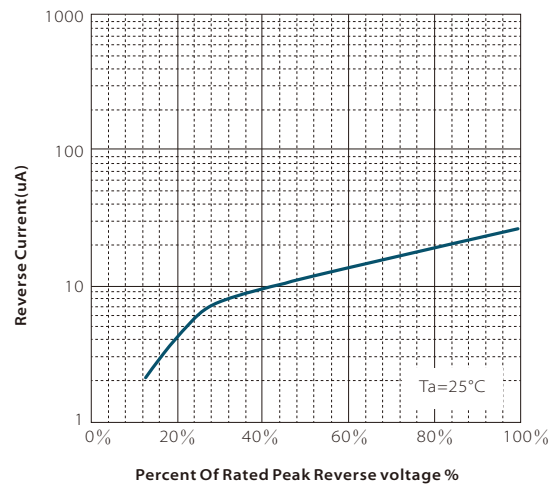
**Fig. 2-Forward Current Derating Curve**



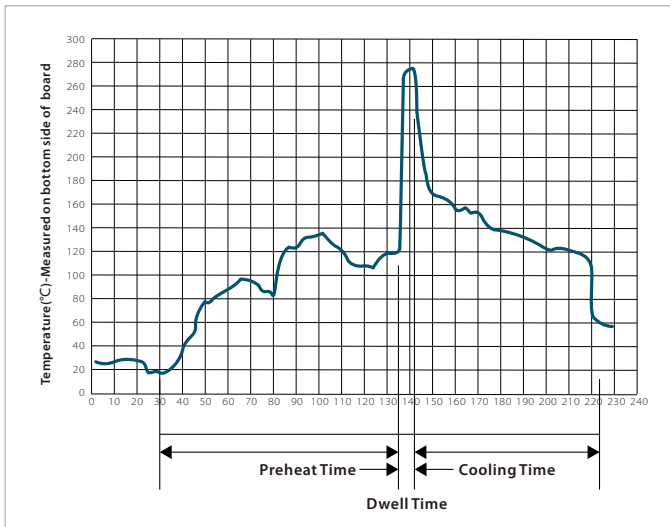
**Fig. 3-Maximum Non Repetitive Peak Forward Surge Current**



**Fig. 4-Typical Reverse Characteristics**

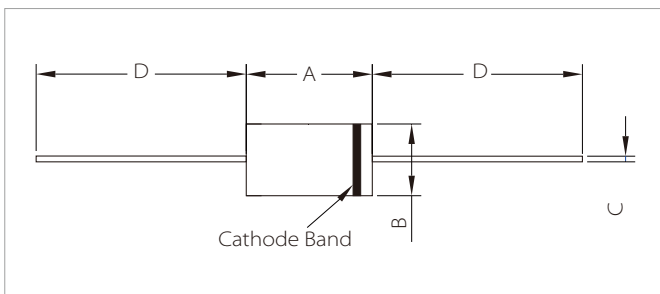


## WAVE SOLDERING



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	Marking	Component Package	Per Carton	Description
TSR5100L	TSR5100L	DO-201	1250pcs	Reel

To find your local partner within Semiwell's website : [www.semiwell.com.cn](http://www.semiwell.com.cn)

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