

## FEATURES

| Super Small Size

| High Reliability



DO-206

## APPLICATIONS

| Car Ignition Systems



Schematic Symbol

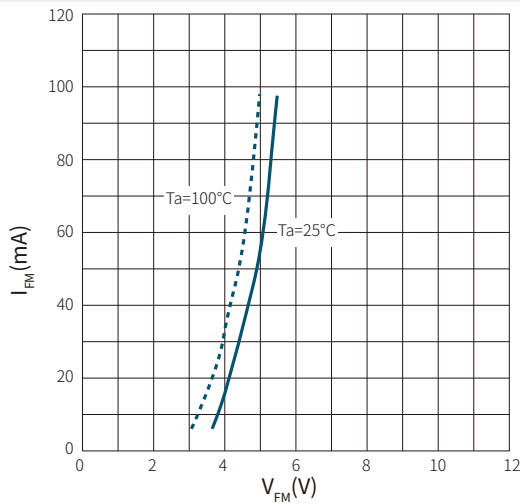
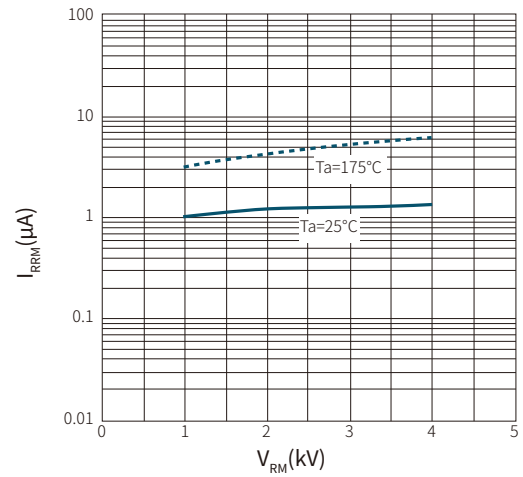
## APPROVALS

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

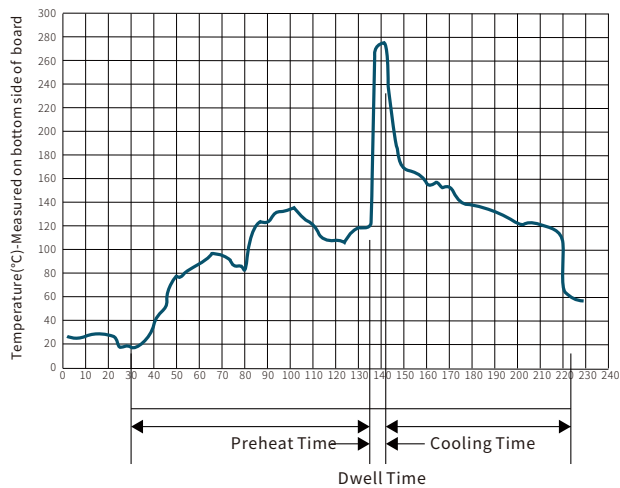
## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter	Symbol	2CL0503	Unit	
Marking		T0503		
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	3	KV	
Non-Repetitive Peak Reverse Voltage	V <sub>RSM</sub>	3.5	KV	
Average Forward Current 60Hz half-sine wave, Resistance load, T <sub>a</sub> =25°C	I <sub>F(AV)</sub>	50	mA	
Non-Repetitive Forward Surge Current 60Hz half-sine wave, 1cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	3	A	
Reverse Surge Current W <sub>p</sub> =1ms, Rectangular-wave, One-shot, T <sub>a</sub> =25°C	I <sub>RSM</sub>	50	mA	
Peak Forward Voltage I <sub>FM</sub> =10mA	V <sub>FM</sub>	7	V	
Peak Reverse Current V <sub>RM</sub> =V <sub>RRM</sub>	I <sub>RRM</sub>	T <sub>a</sub> =25°C	2	μA
		T <sub>a</sub> =175°C	30	
Avalanche Breakdown Voltage I <sub>R</sub> =100μA	V <sub>(BR)</sub>	≥5.5	KV	
Thermal resistance T <sub>amb</sub> =T <sub>lead</sub> , lead length=10mm	R <sub>(th)J-A</sub>	100	°C/W	
Storage Temperature	T <sub>stg</sub>	-65~+175	°C	
Virtual junction temperature	T <sub>(VJ)</sub>	175	°C	

## CHARACTERISTIC CURVES

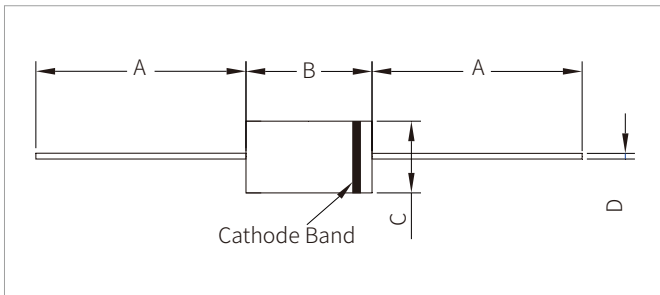
**Fig.1 Forward Characteristics**

**Fig.2 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-206 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.75	-	1.013	-
B	6.3	6.7	0.248	0.264
C	2.3	2.7	0.094	0.106
D	0.47	0.53	0.019	0.021

## ORDERING INFORMATION

Part Number	Component Package	QTY/Box
2CL0503	DO-206	5000PCS

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

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