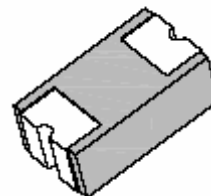


## 1.0A Sintered Glass Passivated Ultra Fast Low Profile Rectifier

### Features

- Low power loss, High efficiency
- For surface mounted applications
- High current capability
- High surge capacity
- Plastic package has UL Flammability Classification 94V-0
- RoHS Compliance



C1206



### Mechanical Data

<b>Case:</b>	Packed with FRP substrate and epoxy underfilled
<b>Terminals:</b>	Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Laser marking
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.012 gram

### Maximum Ratings and Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Description	TCDU 1DW	TCDU 1GW	TCDU 1JW	TCDU 1KW	TCDU 1MW	TCDU 1WW	Unit	Conditions	
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	200	400	600	800	1000	1500	V		
<b>VDC</b>	Max. DC Blocking Voltage	200	400	600	800	1000	1500	V		
<b>VRMS</b>	Max. RMS Voltage	140	280	420	560	700	1050	V		
<b>VF</b>	Max. Forward Voltage	1.0		1.7			6.0	V	Pulse width=300μS, 1% duty cycle, IF=1.0A	
<b>IF(AV)</b>	Average Forward Rectified Current	1.0							A	See Fig.1
<b>IFSM</b>	Peak Forward Surge Current	30			25		15	A		
<b>IR</b>	Reverse Current @ VR = VRRM	1.0		5.0				μA	TA=25°C	
		50							μA	TA=125°C
<b>Trr</b>	Max. Reverse Recovery Time	50			75		50	nS	IF=0.5A, IR=1.0A, Irr=0.25A.	
<b>CJ</b>	Diode Junction Capacitance	10							pF	f=1MHz VR= 4V

# Sintered Glass Passivated Ultra Fast Low Profile Rectifier

## TCDU1DW - TCDU1WW

Symbol	Description	TCDU 1DW	TCDU 1GW	TCDU 1JW	TCDU 1KW	TCDU 1MW	TCDU 1WW	Unit	Conditions
T <sub>J</sub> , T <sub>STG</sub>	Operating Junction and Storage Temperature Range	-65 to +175						°C	

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

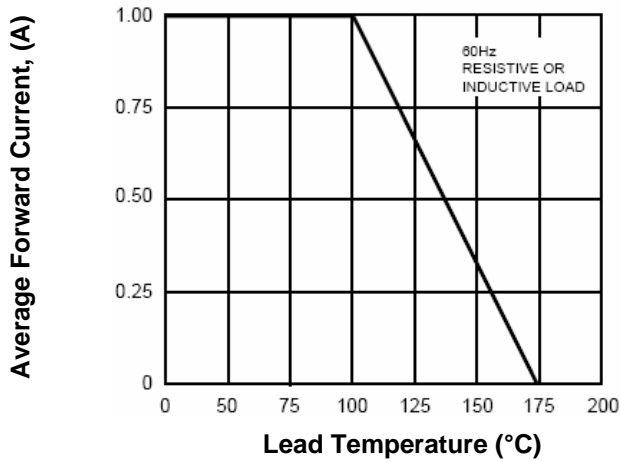


Fig.2- Maximum Non-Repetitive Forward Surge Current

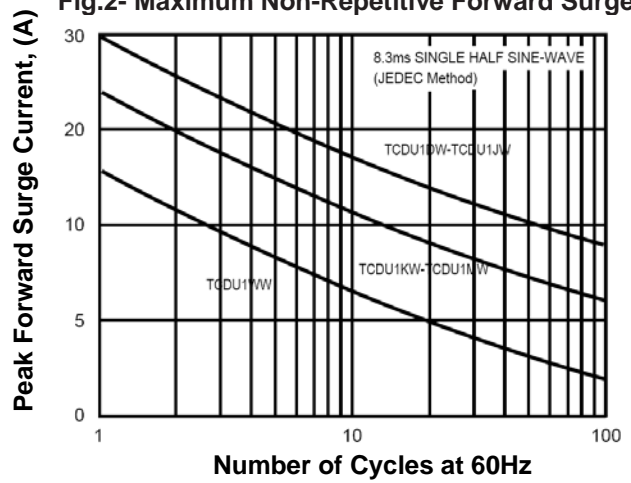


Fig.3- Typical Forward Characteristics

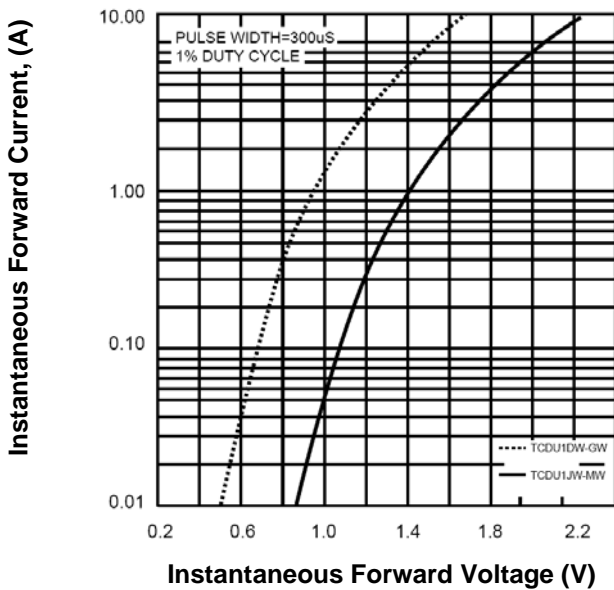
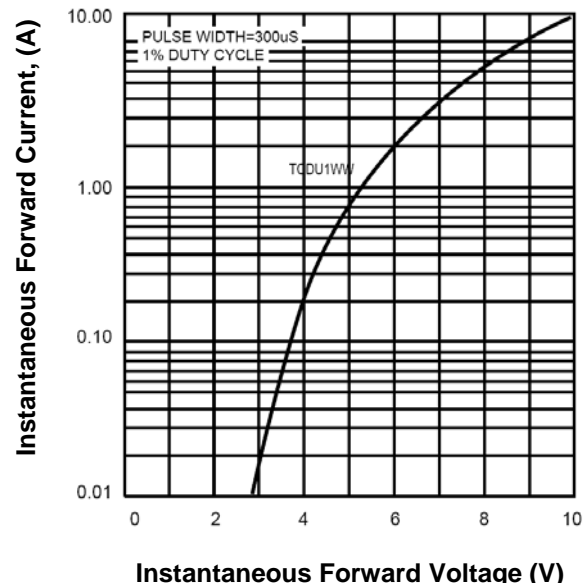


Fig.4- Typical Forward Characteristics

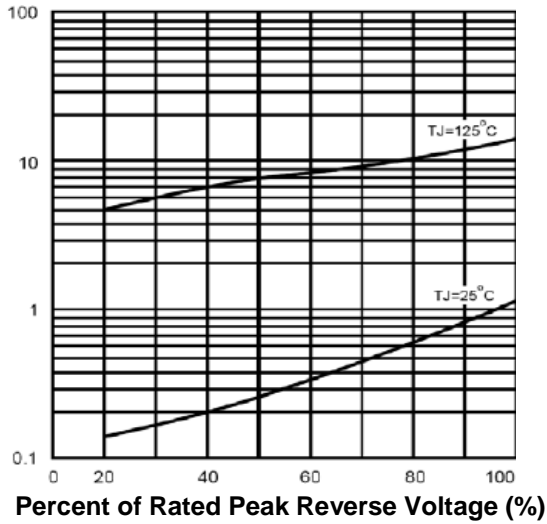


# Sintered Glass Passivated Ultra Fast Low Profile Rectifier

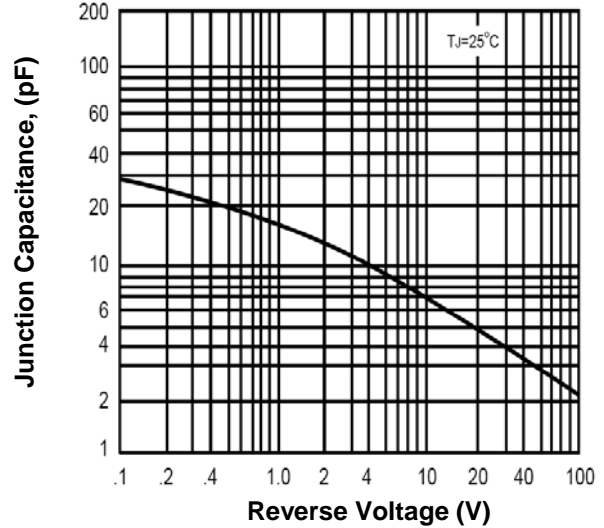
## TCDU1DW - TCDU1WW

Instantaneous Reverse Leakage Current, ( $\mu\text{A}$ )

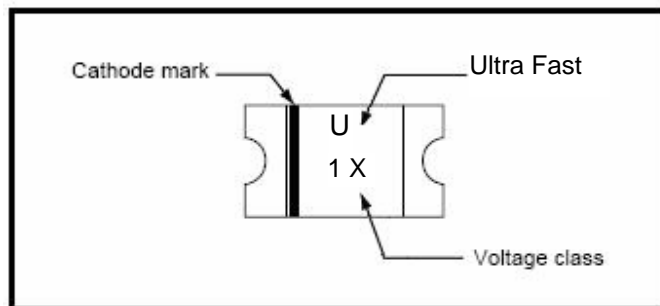
**Fig.5-Typical Reverse Characteristics**



**Fig.6-Typical Junction Capacitance**



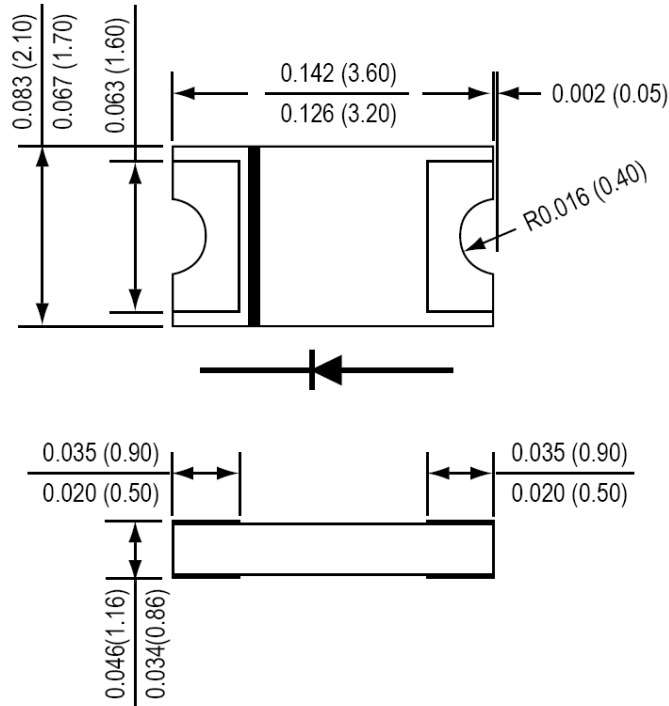
### Marking Information:



# Sintered Glass Passivated Ultra Fast Low Profile Rectifier

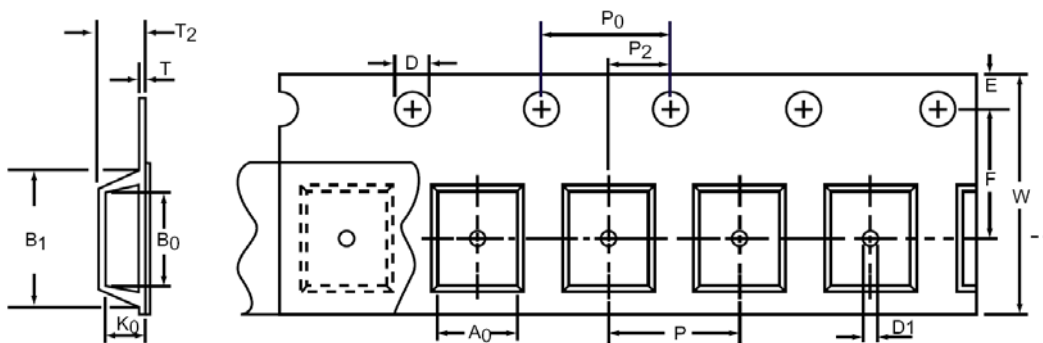
## TCDU1DW - TCDU1WW

### Dimensions in inches (mm)



C1206

### Taping Information (in mm)



Product Type	D	P0	P	W	E
1206	1.50±0.10	4.00±0.10	4.00±0.10	120.0±0.30	1.75±0.1
Tape Size	B1	T	T2	D1	F
12	8.20max.	0.40max.	1.75±0.1	1.5min.	5.50±0.05

# Sintered Glass Passivated Ultra Fast Low Profile Rectifier

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## TCDU1DW - TCDU1WW

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