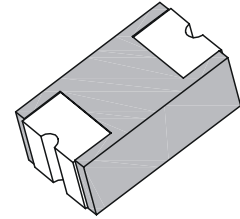


## 1.0A Low Profile Chip Schottky Rectifier

### Features

- Low profile with SMD package
- Low power loss , High efficiency
- High current capability, Low voltage drop
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- RoHS compliant



C0805  
(SOD-323)



### Mechanical Data

<b>Case:</b>	0805 SMD package, Molded plastic body
<b>Terminals:</b>	Pure Tin plated, solderable per MIL-STD-750, Method 2026
<b>Polarity</b>	Laser cathode band marking
<b>Weight:</b>	0.005 gram

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	TSCD12WS	TSCD14WS	TSCD16WS	Unit	Conditions
	Marking Code	A2	A4	A6		
<b>VRRM</b>	Repetitive Peak Reverse Voltage	20	40	60	V	
<b>VDC</b>	Maximum DC Blocking Voltage	14	28	42	V	
<b>VRWM</b>	Working Peak Reverse Voltage	20	40	60	V	
<b>IF(AV)</b>	Forward Rectified Current	1.0			A	SEE FIG.1
<b>IFSM</b>	Non-repetitive Peak Forward Surge Current	10			A	8.3ms single half sine-wave
<b>TJ</b>	Operating Junction temperature range	-55 to +125	-55 to +150		° C	
<b>TSTG</b>	Storage Temperature Range	-55 to +150			° C	

### Electrical Characteristics *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	TSCD12WS	TSCD14WS	TSCD16WS	Unit	Conditions
<b>VF</b>	Forward Voltage	0.45	0.50	0.65	V	IF= 1.0A(Note1)
<b>Rθ-JL</b>	Typical Thermal Resistance	28			° C/W	(Note 2)
<b>Rθ-JA</b>		88				
<b>IR</b>	Reverse Current	200			µA	

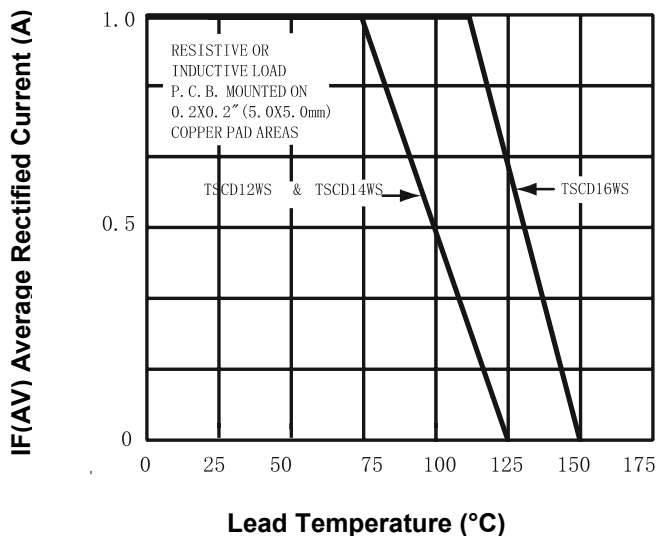
# 1.0A Low Profile Chip Schottky Rectifier

## TSCD12WS-TSCD16WS

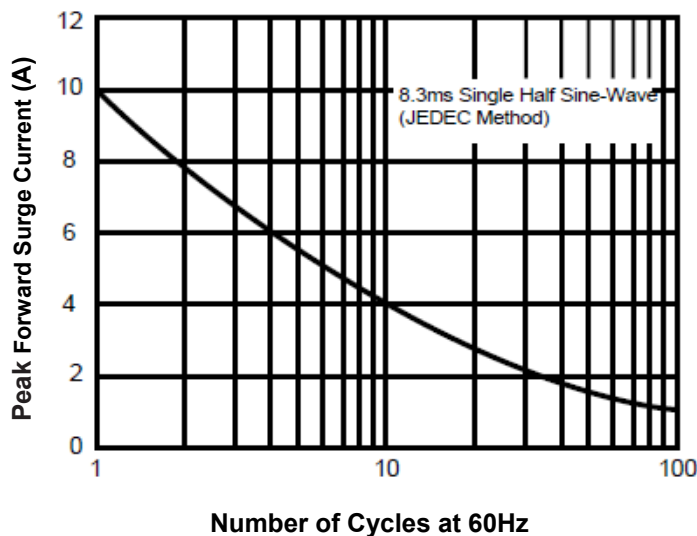
**NOTES:**

1. Pulse test width PW=300usec, 1% duty cycle.
2. Mounted on P.C. board with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

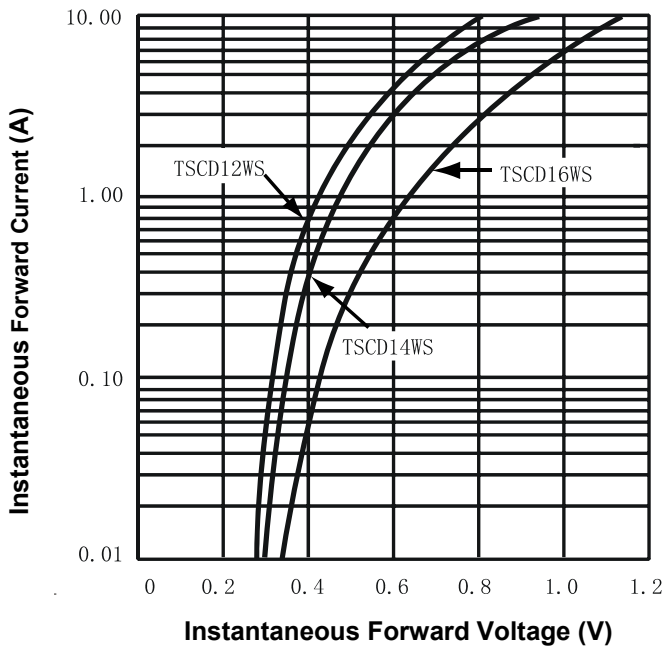
### Typical Characteristics Curves



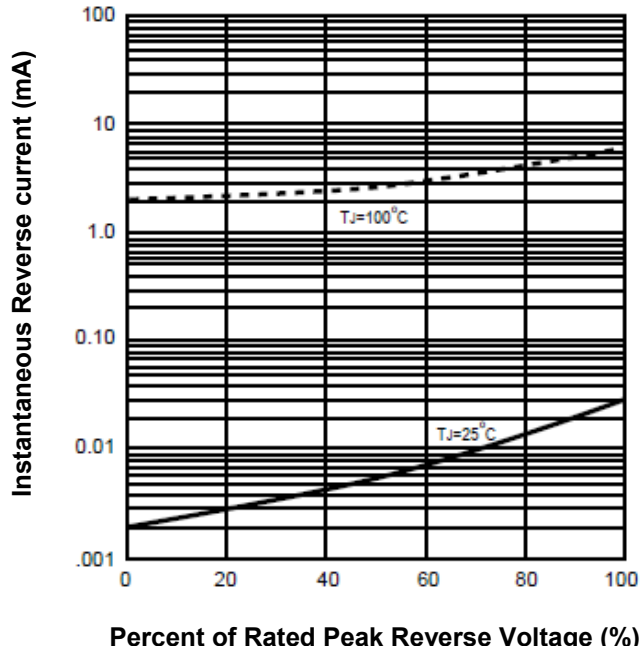
**Fig.1- Forward Current Derating Curve**



**Fig.2- Max. Non-Repetitive Forward Surge Current**



**Fig.3- Typical Forward Characteristics**



**Fig.4- Typical Reverse Characteristics**

# 1.0A Low Profile Chip Schottky Rectifier

## TSCD12WS-TSCD16WS

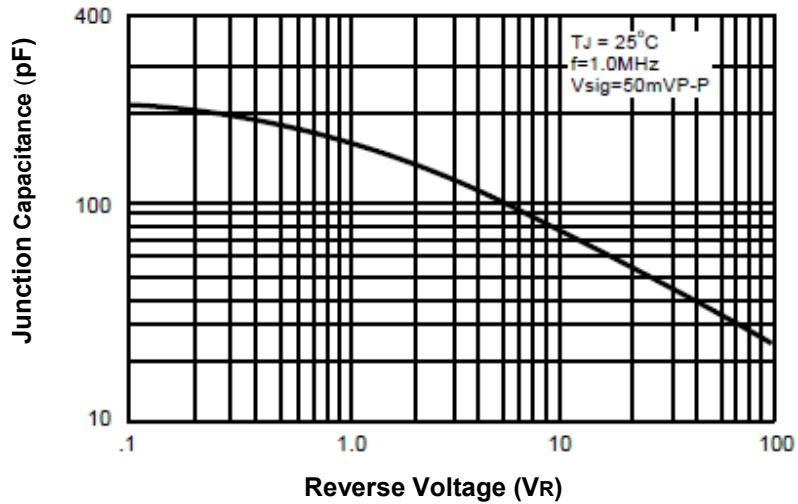
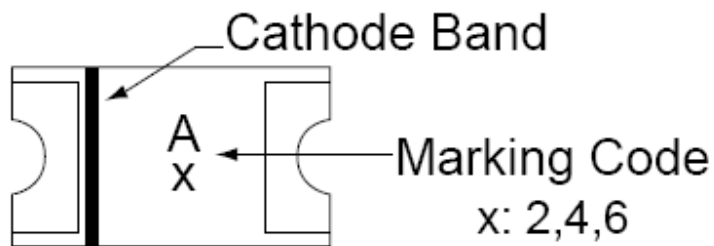


Fig.5- Typical Junction Capacitance

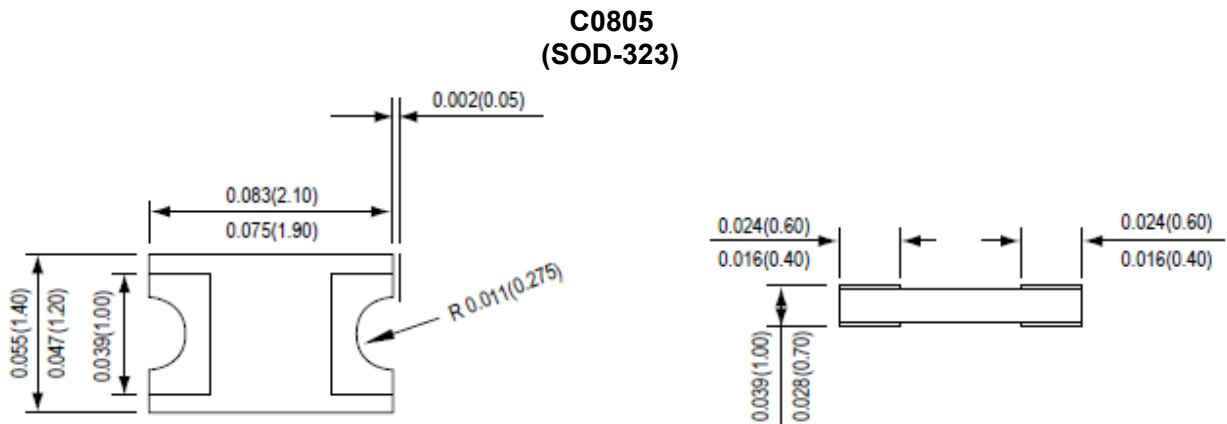
### Marking Information:



# 1.0A Low Profile Chip Schottky Rectifier

## TSCD12WS-TSCD16WS

### Dimensions in inch (mm)



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