

## Trench MOS Barrier Schottky Rectifier



DO-15  
(DO-204AC)

Cathode  Anode

### Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

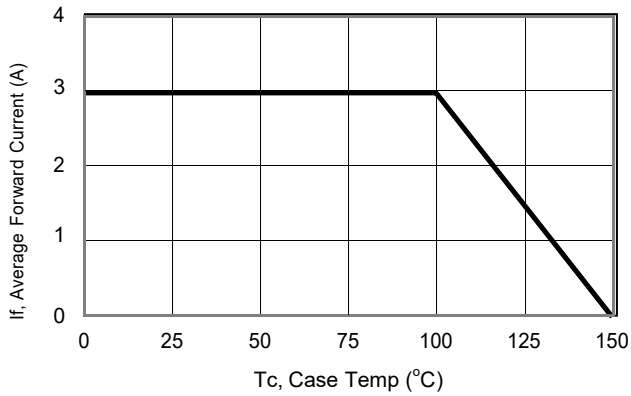
Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	40		V
Maximum average forward rectified current		I <sub>F(AV)</sub>	3		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	50		A
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-65 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)		R <sub>θJC</sub>	22		°C/W
Instantaneous forward voltage	I <sub>F</sub> =3A	T <sub>J</sub> =25°C	TYP.	MAX.	V
			0.42	-	
	I <sub>F</sub> =3A	T <sub>J</sub> =125°C	0.35	-	
Instantaneous reverse current per diode at rated reverse voltage	T <sub>J</sub> =25°C		50	-	uA
	T <sub>J</sub> =125°C		20	-	mA

Notes:

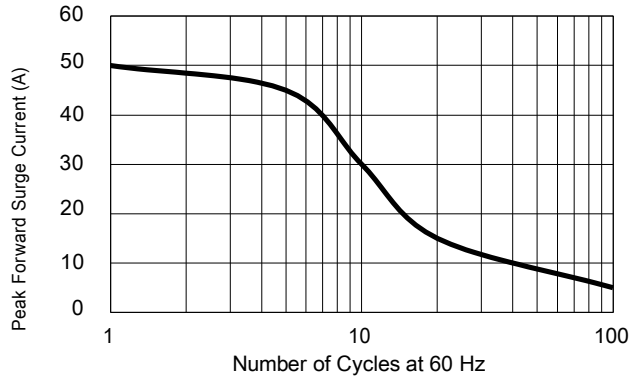
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

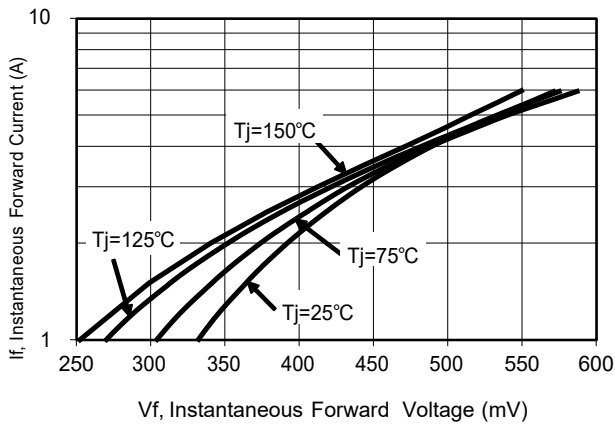
## RATINGS AND CHARACTERISTICS CURVES



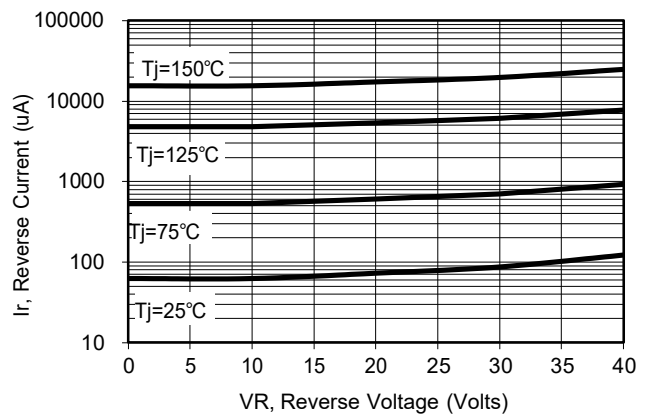
Current Derating, Case



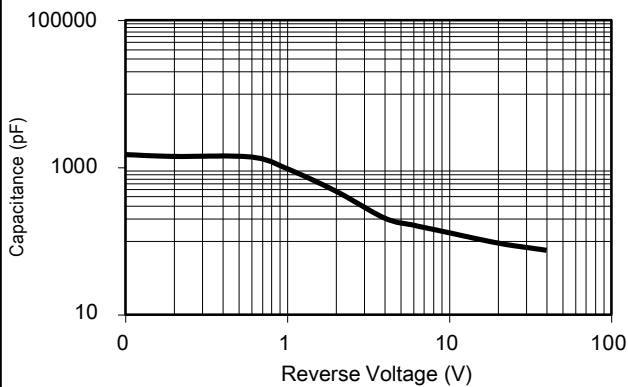
Maximum Repetitive Surge Current



Typical Forward Voltage



Typical Reverse Current



Typical Junction Capacitance

## PACKAGE OUTLINE

DO-15 dimensions

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	6.05	6.75	0.238	0.266
B	2.95	3.53	0.116	0.139
C	26	31	1.024	1.220
D	0.71	0.88	0.028	0.035