

**Trench MOS Barrier Schottky Rectifier**

**Reverse Voltage - 100 V**

**Forward Current - 5 A**

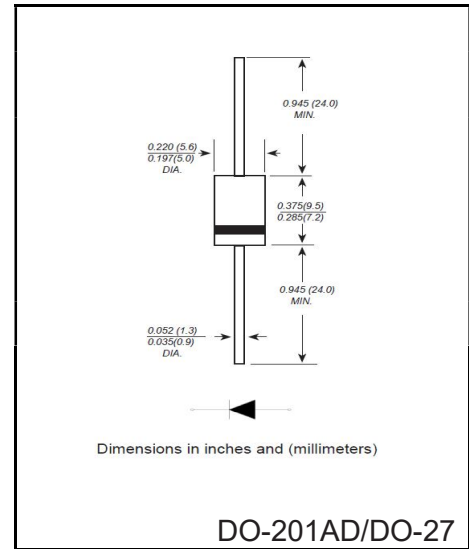


**FEATURES**

- ◆ Advanced trench technology
- ◆ Low forward voltage drop
- ◆ Low power losses
- ◆ High efficiency operation
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆ Case: DO-201AD/DO-27
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.98g / 0.0345oz



**Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified**

Parameter		Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	100	V
Maximum RMS voltage		$V_{RMS}$	100	V
Maximum DC Blocking Voltage		$V_{DC}$	100	V
Maximum Average Forward Rectified Current	Per diode	$I_{F(AV)}$	5	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		$I_{FSM}$	200	A
Operating Temperature Range		$T_J$	-55 ~ +150	°C
Storage Temperature Range		$T_{STG}$	-55 ~ +150	°C
Typical Thermal Resistance Per diode(munted on FR-4 PCB)	DO-27	$R_{\theta JC}$	22	°C/W

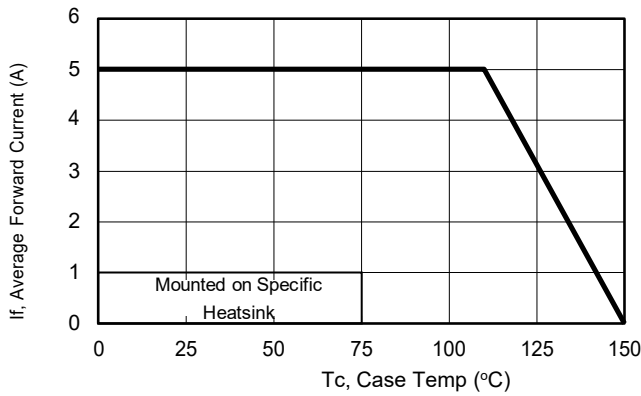
**Note1: Thermal resistance from Junction to case per leg mounted on heatsink.**

**Electrical Characteristics (Per Leg) unless otherwise specified**

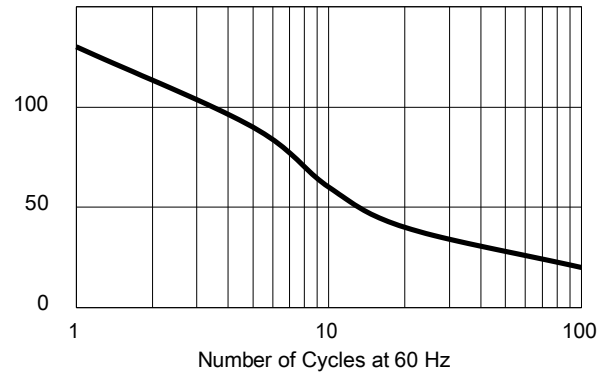
Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		$V_F$	Typ	Max	V
at $I_F=2A$ Instantaneous forward voltage per diode	TA=25°C		0.49	-	
	TA=125°C		0.36	-	
at $I_F=5A$ Instantaneous forward voltage per diode	TA=25°C		-	0.54	
	TA=125°C	0.48	-		
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	$I_R$	-	60	uA
	TA=125°C		-	40	mA

**Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle  
(2) Pulse test: Pulse width ≤ 40 ms**

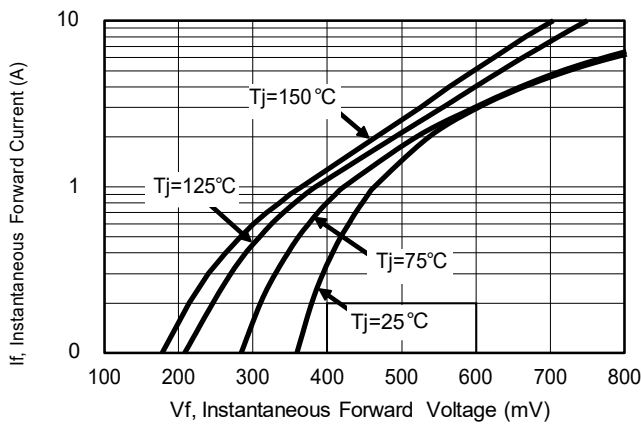
**Ratings and Characteristic Curves**



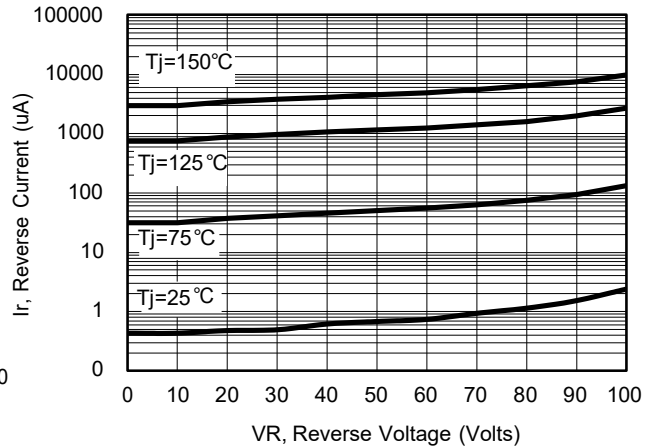
**Current Derating, Case**



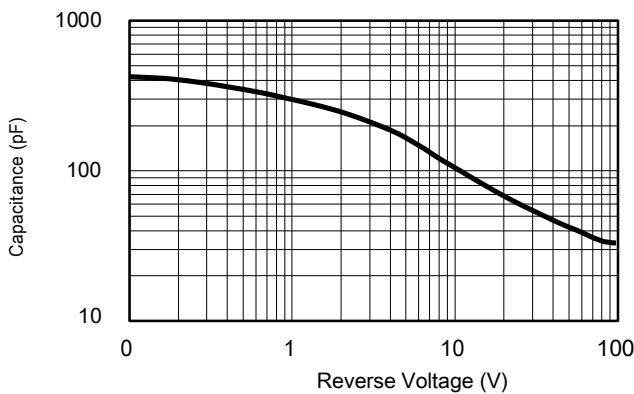
**Maximum Repetitive Surge Current**



**Typical Forward Voltage**

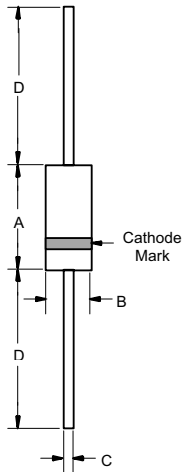


**Typical Reverse Current**



**Typical Junction Capacitance**

**Package Outline DO-201AD(DO-27)**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
DO-201AD(DO-27)	BOX	250/1000/1250	EIA-481-1