

Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 80 V

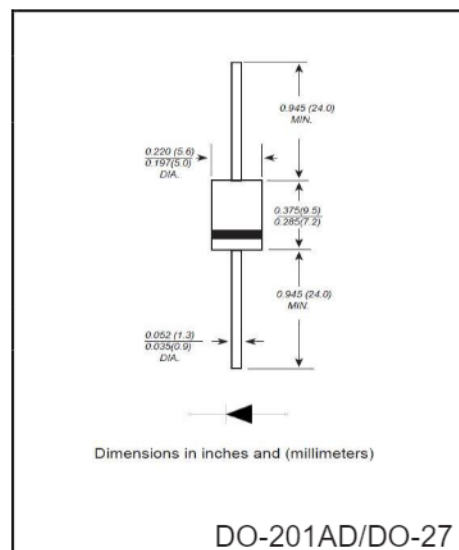
Forward Current - 15 A

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}	80	V
Maximum RMS voltage		V_{RMS}	80	V
Maximum DC Blocking Voltage		V_{DC}	80	V
Maximum Average Forward Rectified Current	Per diode	$I_{F(AV)}$	15	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	180	A
Operating Temperature Range		T_J	-40 ~ +150	°C
Storage Temperature Range		T_{STG}	-40 ~ +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.

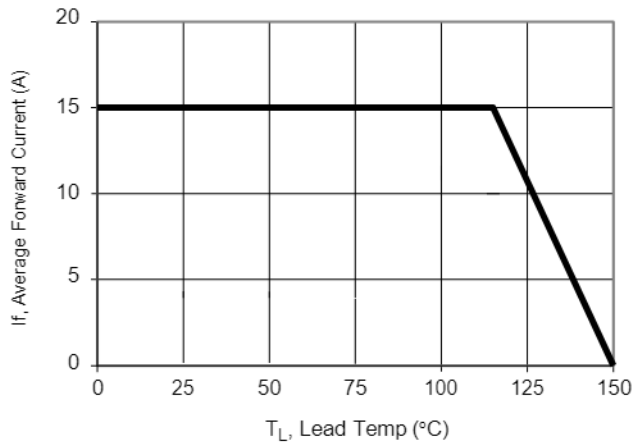
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V _F	Typ	Max	V
at I _F =3A Instantaneous forward voltage per diode	TA=25°C		0.47	0.53	
	TA=125°C		0.39	-	
at I _F =15A Instantaneous forward voltage per diode	TA=25°C		0.65	-	
	TA=125°C		0.54	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I _R	20	50	uA
	TA=125°C		-	20	mA

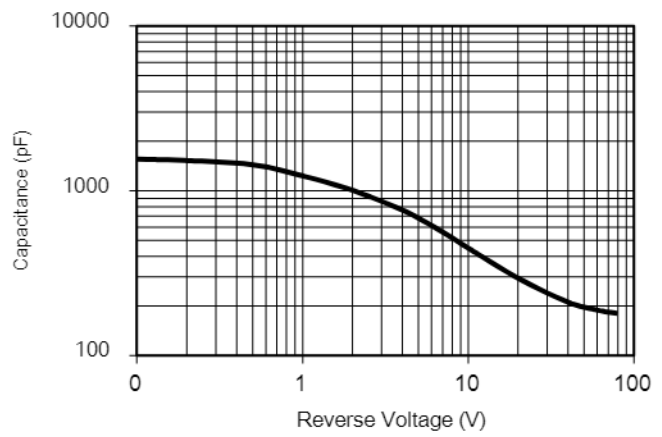
Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

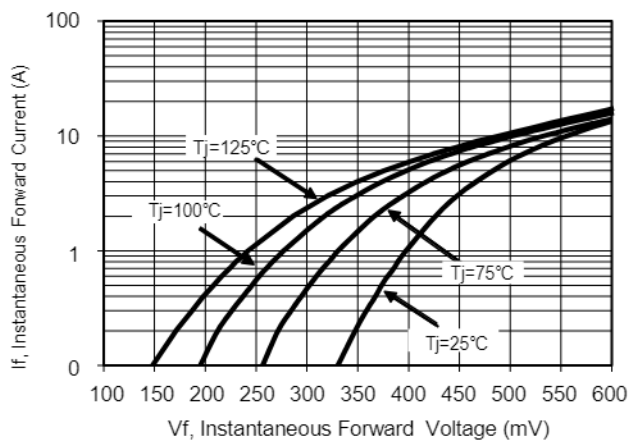
RATINGS AND CHARACTERISTIC CURVES



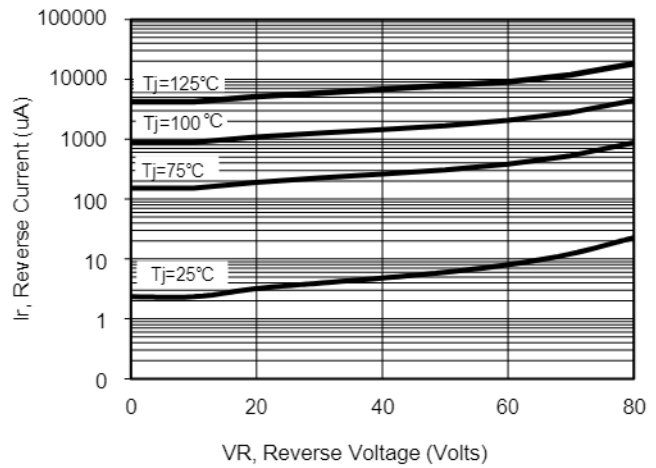
Current Derating, Case



Typical Junction Capacitance

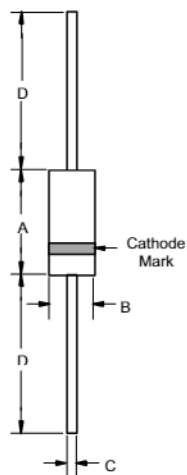


Typical Forward Voltage



Typical Reverse Current

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