

Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 80 V

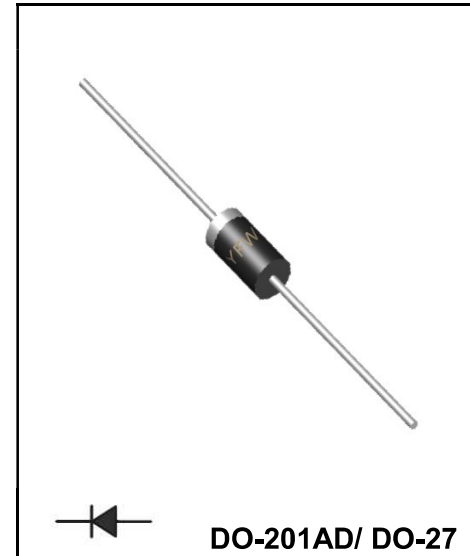
Forward Current - 15 A

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.

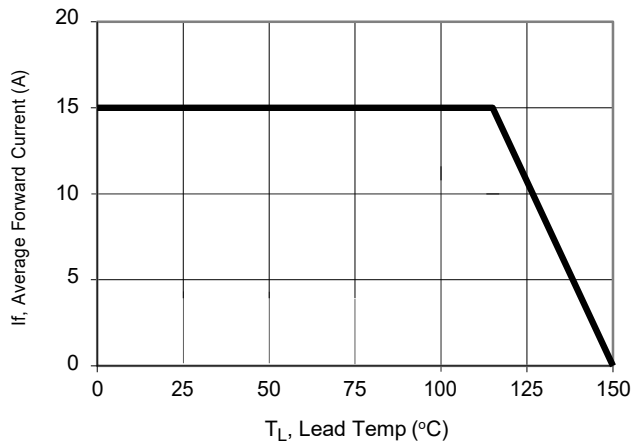
Electrical Characteristics (Per Leg) unless otherwise specified

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

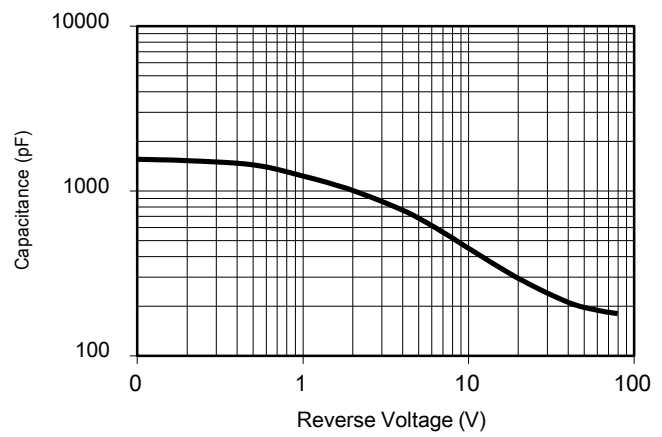
Note2: (1)Pulse test: 300 μ s pulse width, 1 % duty cycle

(2) Pulse test: Pulse width $\leq$ 40 ms

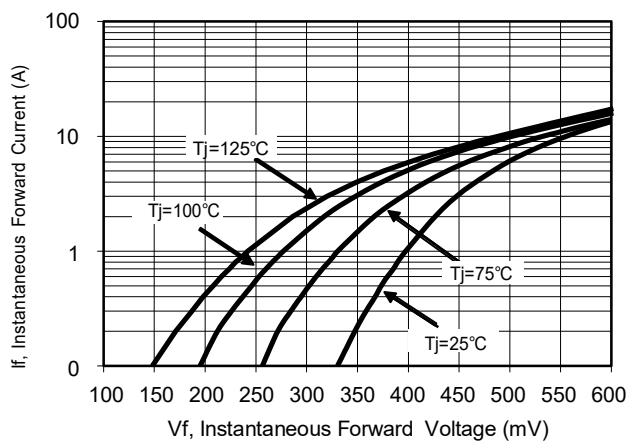
RATINGS AND CHARACTERISTIC CURVES



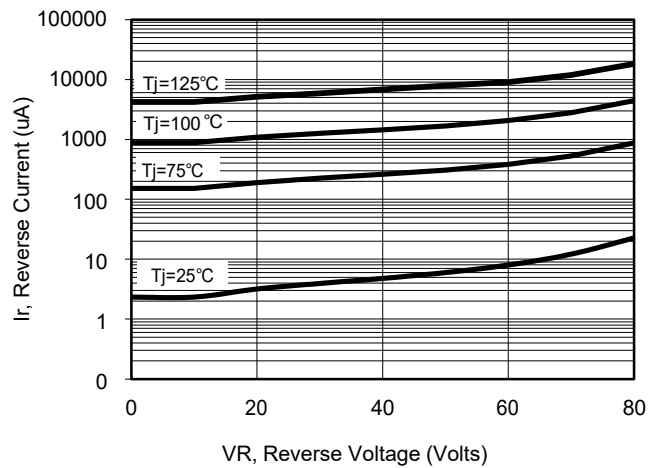
Current Derating, Case



Typical Junction Capacitance



Typical Forward Voltage



Typical Reverse Current

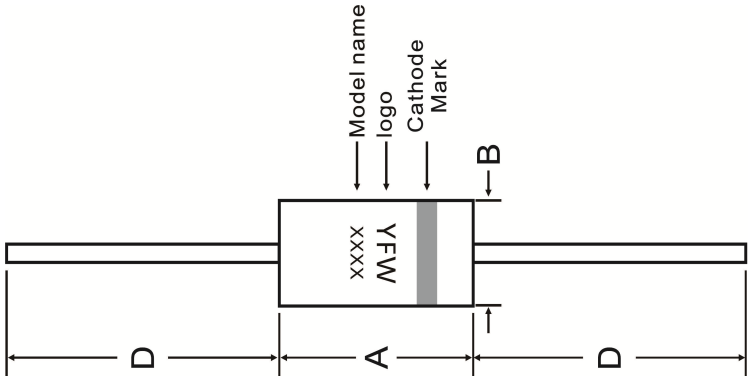
Ordering information

Package	Packing Description	Packing Quantity
DO-201AD/DO-27	bulk	250PCS/500PCS/Box 25000PCS/Carton
	braid	1000PCS/1250PCS/Box 10000PCS/Carton/12500PCS/Carton

Package Dimensions

DO-201AD/DO-27

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	-	9.50	-	0.370
B	-	6.40	-	0.250
C	1.20	1.30	0.048	0.052
D	25.4	-	1.00	-



The diagram illustrates the physical dimensions of the DO-201AD/DO-27 package. It shows a central rectangular body with two leads extending from it. Dimension A represents the width of the central body, B represents its height, C represents its thickness, and D represents the length of the leads. The central body is marked with 'YFW' and 'xxxx'. A cathode mark is also indicated on the central body.

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