Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 40 V

Forward Current - 5 A

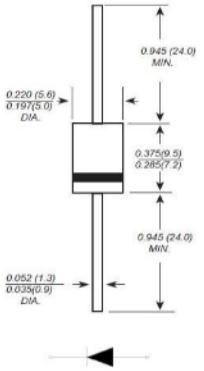
lead-free ROHS

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



Dimensions in inches and (millimeters)

DO-201AD/DO-27

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

Parameter		Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	40	V
Maximum RMS voltage		V_{RMS}	40	V
Maximum DC Blocking Voltage		V_{DC}	40	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}	150	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	$R_{\theta JC}$	20	°C/W

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

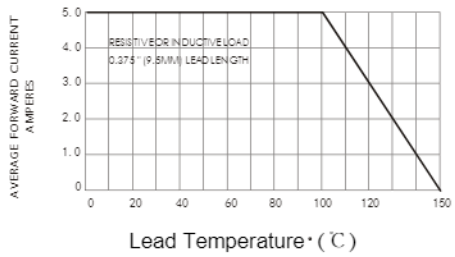
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at I_F=1A Instantaneous forward voltage per diode	TA=25°C		0.28	-	
	TA=125°C		0.21	-	
at I_F=5A Instantaneous forward voltage per diode	TA=25°C		0.45	-	
	TA=125°C		0.36	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	-	0.2	uA
	TA=125°C		-	50	mA

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

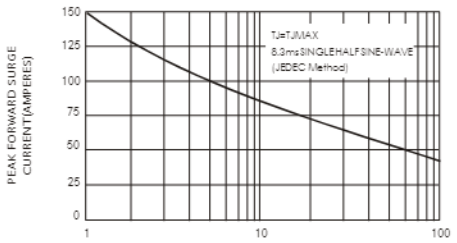
RATINGS AND CHARACTERISTIC CURVES

Forward Current Derating Curve



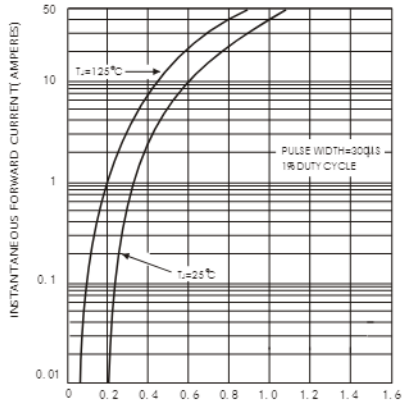
Lead Temperature (℃)

Maximum Non-repetitive Peak Forward Surge Current



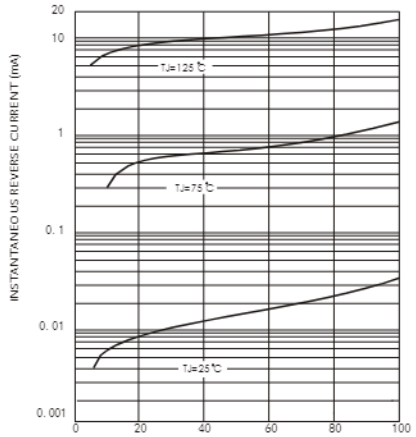
Number Of Cycles At 60Hz

Typical Instantaneous Forward Characteristics



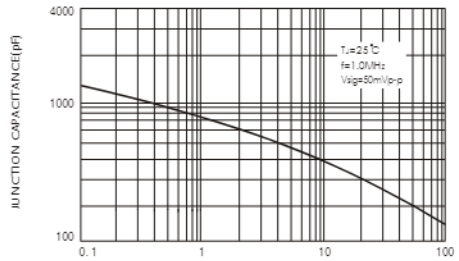
Instantaneous Forward Voltage(Volts)

Typical Reverse Characteristics



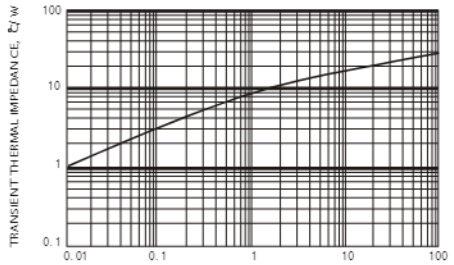
Percent Of Rated Peak Reverse Voltage %

Typical Juncyion Capacitance



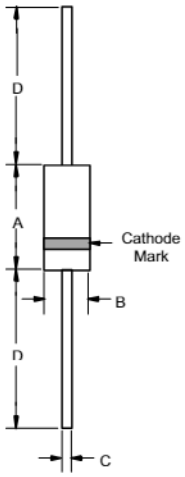
Reverse Voltage.Volts

Typical Transient Thermal Impedance



T,Pulse Duration,sec.

Package Outline DO-201AD(DO-27)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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