

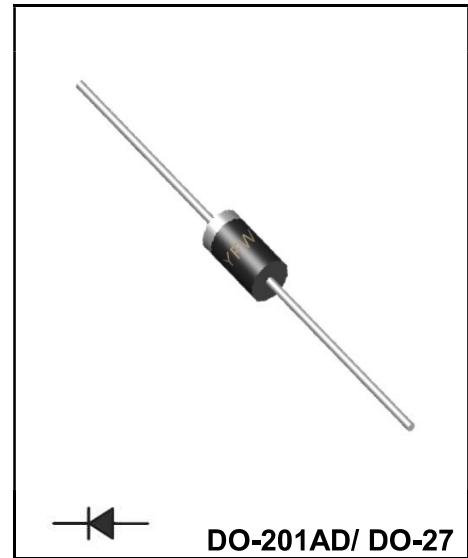
Schottky Barrier Rectifier

Reverse Voltage - 45V

Forward Current - 10 A

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Low forward voltage drop
- ◆ Metal silicon junction ,majority carrier conduction
- ◆ Guard ring for over voltage protection
- ◆ Low power loss high efficiency
- ◆ High current capability ,Low forward voltage drop High surge capability
- ◆ For use in low voltage ,high frequency inverters,free wheeling ,and polarity protection applications
- ◆ High temperature soldering:260°C MAX at 10 seconds,per JESD 22-B106 or MIL-STD-750,method 2026
- ◆ Case: JEDEC DO-27(D0-201AD) molded plastic body



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

Parameter		Symbols	YFW10L45	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	45	V
Maximum RMS voltage		V_{RMS}	31.5	V
Maximum DC Blocking Voltage		V_{DC}	45	V
Maximum Average Forward Rectified Current	Per diode	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	125	A
Operating Temperature Range		T_J	-65 to +150	°C
Storage Temperature Range		T_{STG}	-65 to +150	°C
Thermal resistance from junction to ambient	DO-27	$R_{\theta JC}$	25	°C/W

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

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Min	Typ	Max	Units
Maximum instantaneous forward voltage at $I_{F(AV)}$ (Note 1)	1A@ T=25°C 2A@T=25°C 3A@T=25°C 5A@T=25°C 10A@T=25°C	V_F	-	0.37	-	V
	1A@ T=105°C 2A@T=105°C 3A@T=105°C 5A@T=105C 10A@T=105C		-	0.29	-	
Maximum Reverse Current at RatedDC Blocking Voltage(Note 2)	TA=25°C	I_R	-	70	120	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

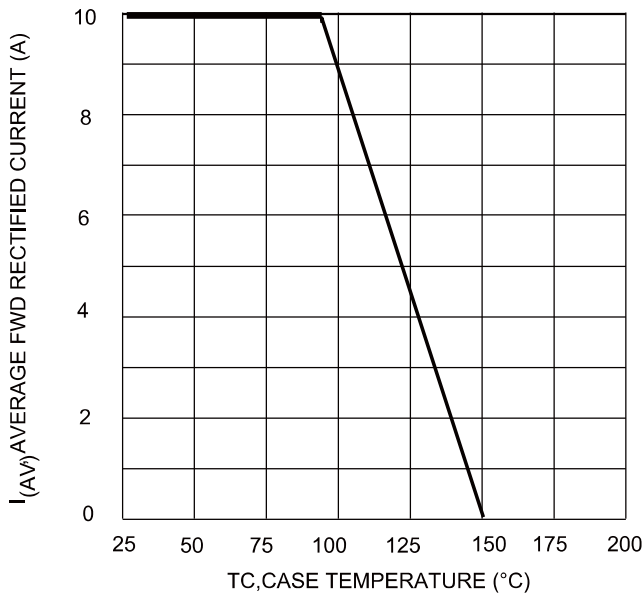


Fig. 1 Forward Derating Curve

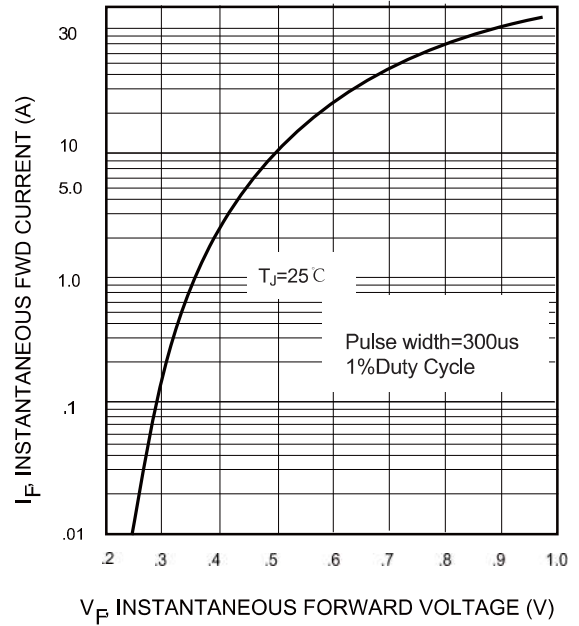


Fig. 2 Typical Forward Characteristics

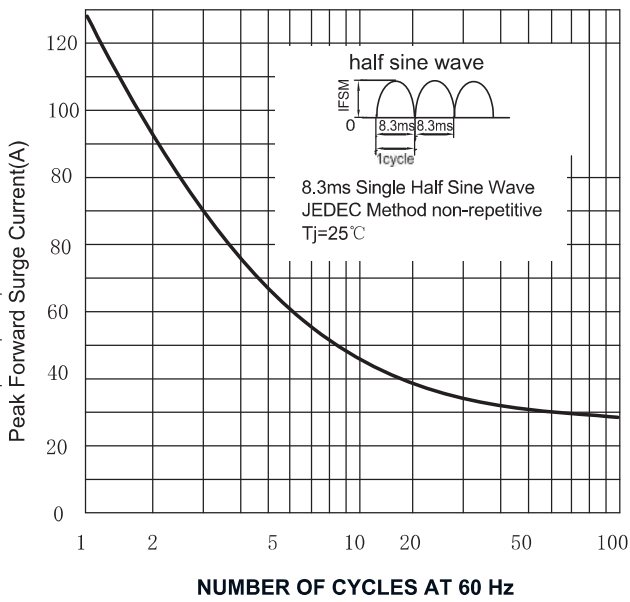


Fig. 3 Peak Forward Surge Current

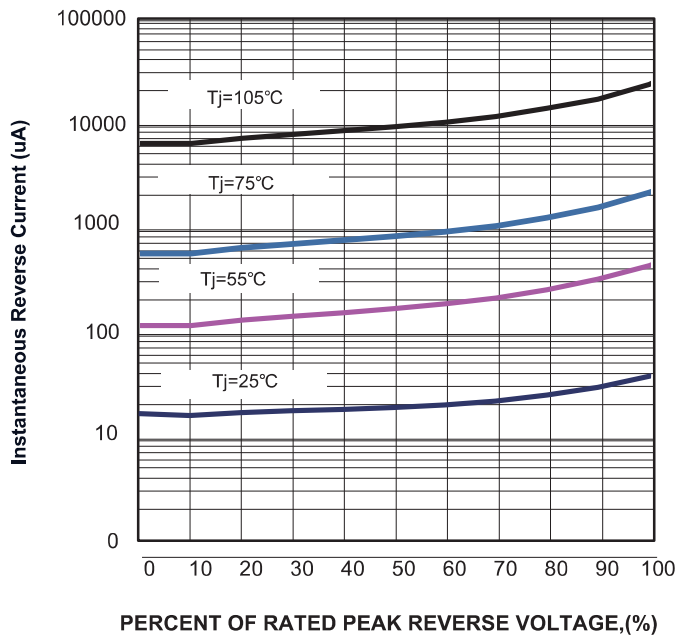


FIG.4-TYPICAL FORWARD CHARACTERISTICS

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	-

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