

Super Fast Recovery Rectifier

Reverse Voltage 200 Volts Forward Current 2.0 Ampere

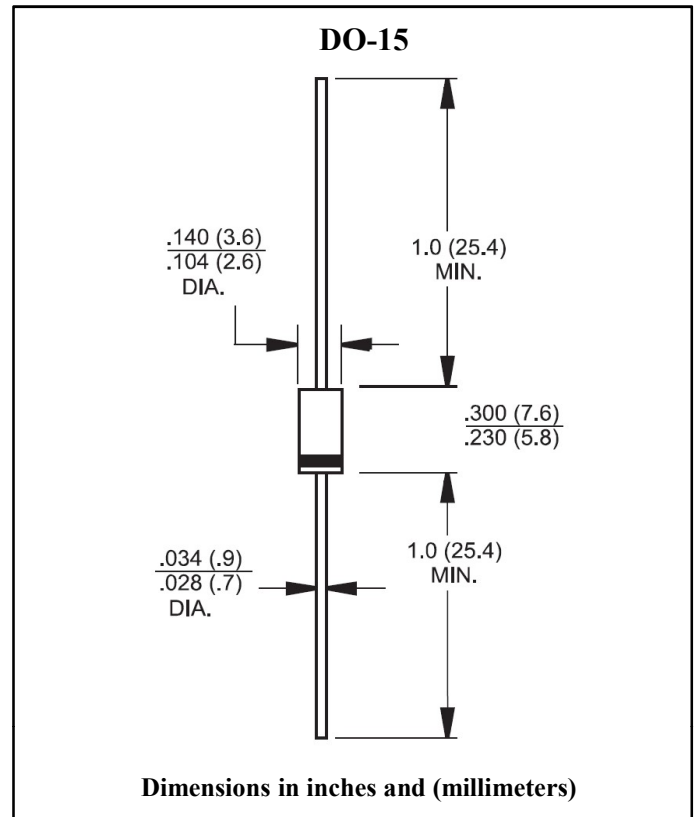
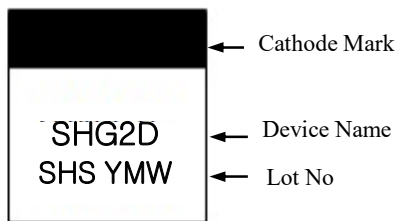
Features

- Ideally suited for use in very frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- High surge current capability

Mechanical Data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds /0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 0.4gram

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified
 Single phase half wave 60 Hz, resistive or inductive load
 For capacitive load, derate current by 20%

Parameter	Symbol	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V	
Maximum RMS Voltage	V_{RMS}	140	V	
Maximum DC Blocking Voltage	V_{DC}	200	V	
Maximum Average Forward Rectified Current	$I_F(AV)$	2.0	A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80	A	
Maximum instantaneous forward voltage at 2.0A	V_F	0.95	V	Note 1
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0	uA	$T_a=25^\circ C$
		50	uA	$T_a=125^\circ C$
Maximum Reverse Recovery Time	t_{rr}	25	ns	Note 2
Typical Junction Capacitance	C_J	30	pF	Note 3
Operation Junction Temperature Range	T_J	-55 to +150	°C	
Storage Temperature Range	T_{STG}	-55 to +150	°C	

Note 1. Pulse test : Pulse width 300us, Duty cycle 1%
 Note 2. Reverse Recovery Test Conditions : $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 Note 3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

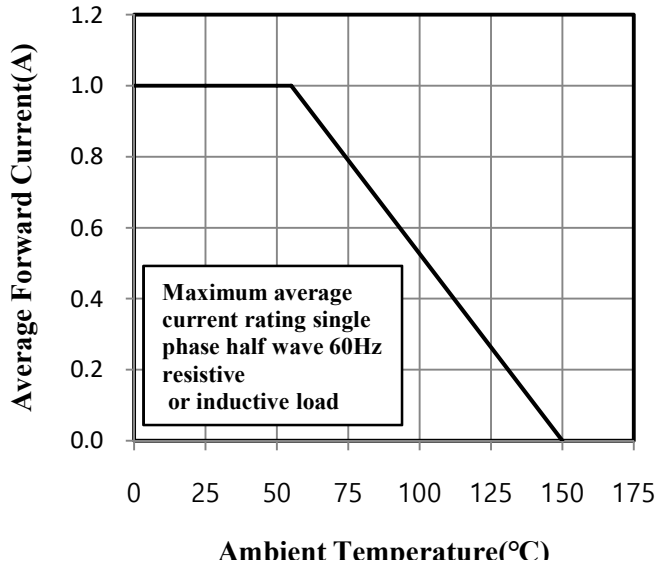


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

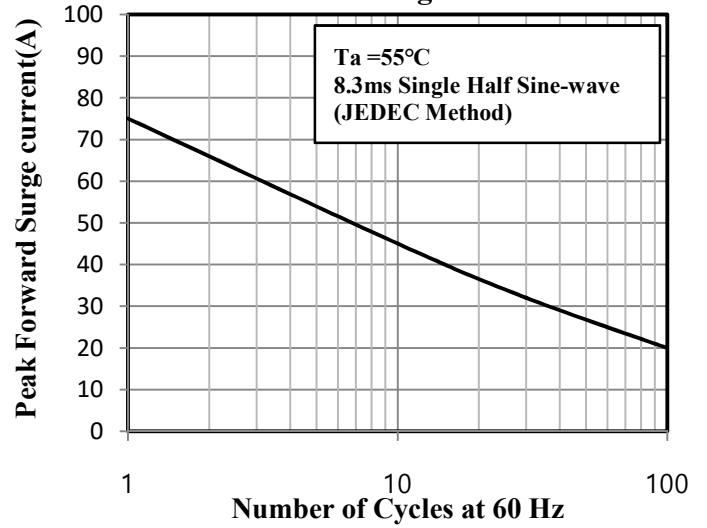


Fig.3 Typical Instantaneous Forward Characteristics

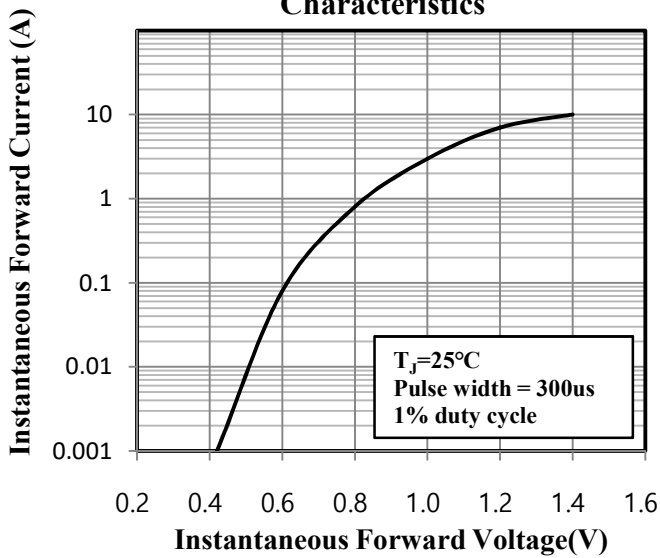


Fig.4 Typical Junction Capacitance

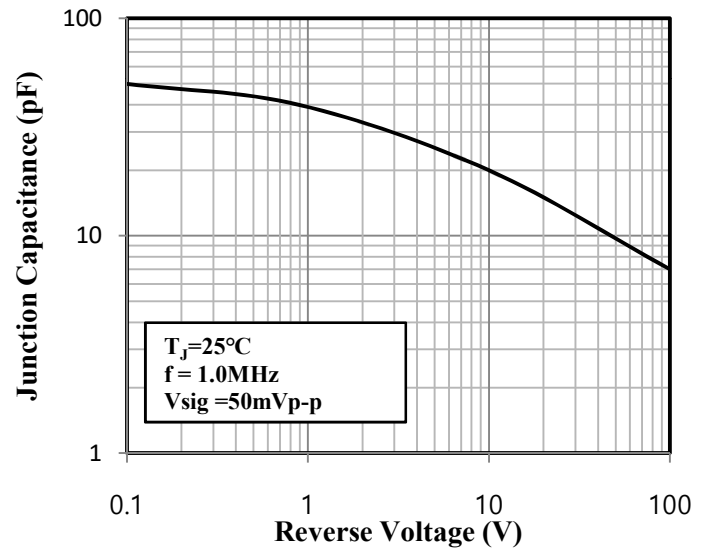


Fig.5 Typical Reverse Characteristics

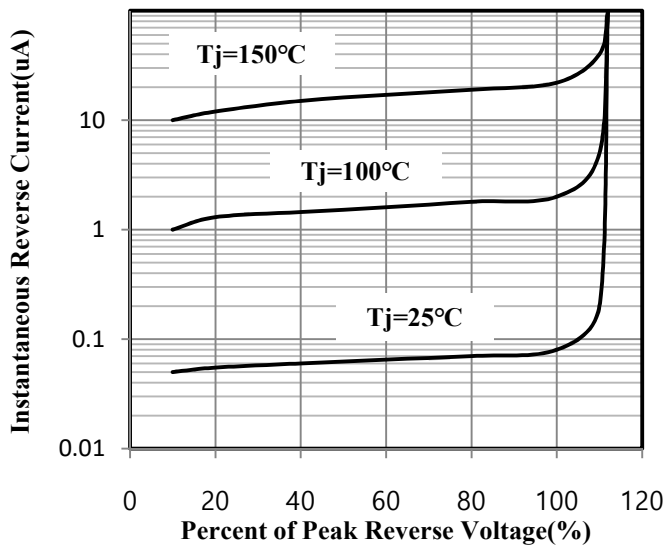


Fig.6 Reverse Recovery Time Characteristic and Test Circuit Diagram

