Zibo Seno Electronic Engineering Co., Ltd.

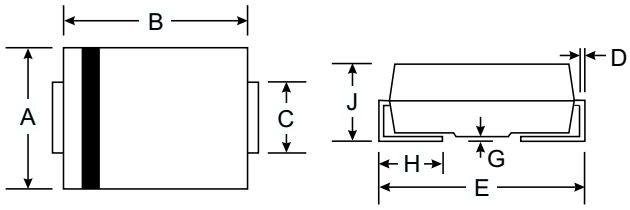
淄博圣诺

MURS310 – MURS3100

3.0A SURFACE MOUNT ULTRAFAST DIODE

Features

- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Surge Overload Rating to 100A Peak
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.20 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

SMC/DO-214AB		
Dim	**Min**	**Max**
A	5.59	6.22
B	6.60	7.11
C	2.75	3.25
D	0.152	0.305
E	7.75	8.13
F	2.00	2.62
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	MURS 310	MURS 320	MURS 330	MURS 340	MURS 360	MURS 380	MURS 3100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	800	V
Average Rectified Output Current @T_L =100°C	I_O	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Forward Voltage @I_F = 3.0A	V_{FM}	1.0			1.3	1.7			V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	2.0 500							μA
Reverse Recovery Time (Note 1)	t_{rr}	50				75			nS
Typical Junction Capacitance (Note 2)	C_j	25							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	30							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm^2 land area.

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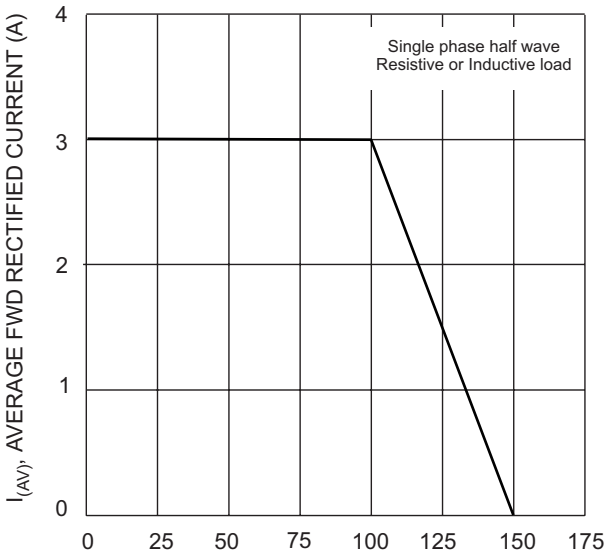


Fig. 1 Forward Current Derating Curve

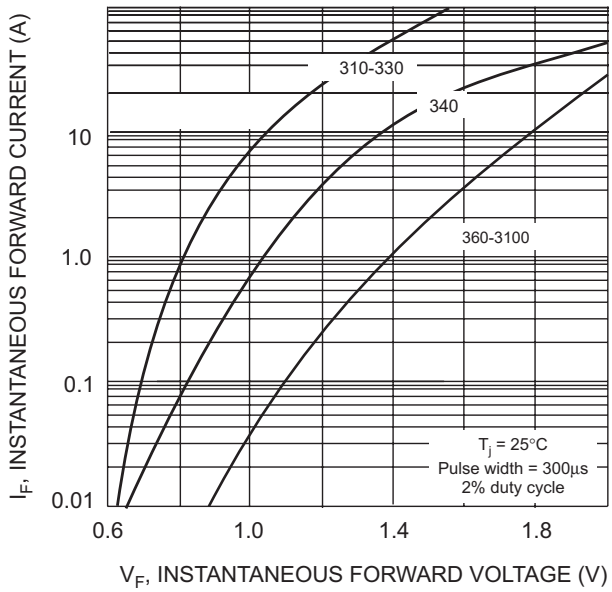


Fig. 2 Typical Forward Characteristics

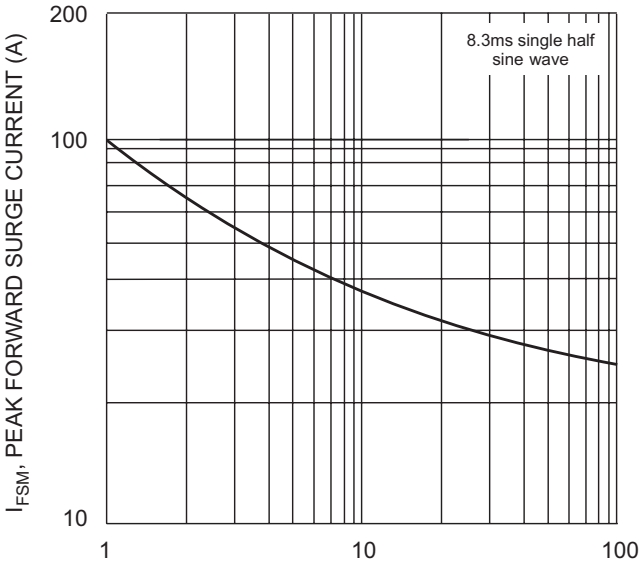


Fig. 3 Peak Forward Surge Current

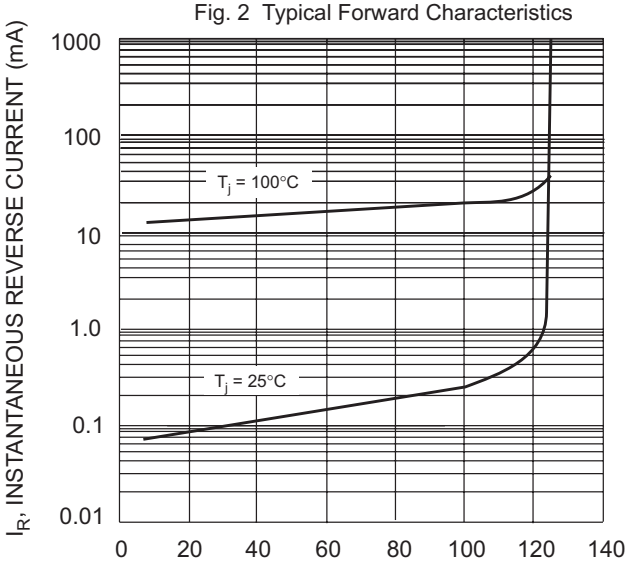
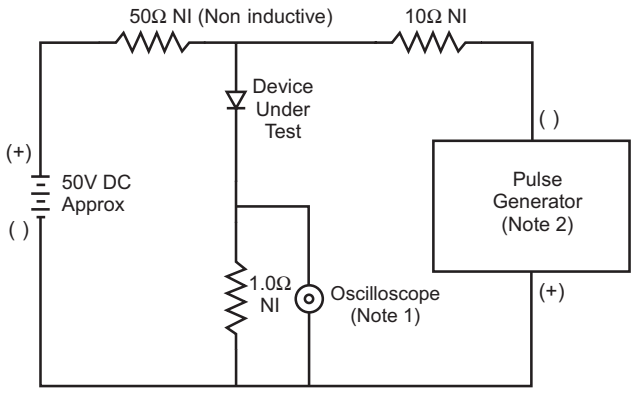
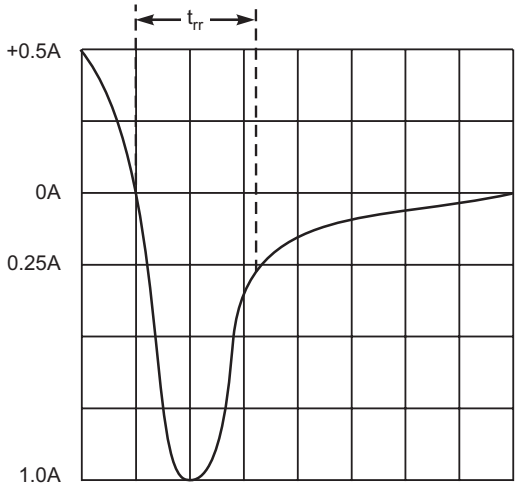


Fig. 4 Typical Reverse Characteristics





Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
2. Rise Time = 10ns max. Input Impedance = 50Ω.

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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