

# Surface Mount Rectifier



RoHS  
Compliant



## Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-0

## Mechanical Data

Case	: SMB/DO-214AA, Molded Plastic
Terminals	: Solder Plated, Solderable per MIL-STD-750, Method 2026
Polarity	: Cathode Band or Cathode Notch
Forward Current	: 1 Amperes
Marking	: Type Number
Weight	: 0.093 grams(approx)

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Characteristics	Symbol	MURS120+	MURS160+	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	600	V
Working Peak Reverse Voltage	$V_{RMS}$	200	600	
DC Blocking Voltage	$V_R$	200	600	
RMS Reverse Voltage	$V_{R(RMS)}$	140	420	
Average Rectified Output Current @ $T_L = 90^\circ\text{C}$	$I_o$	1		A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	40	35	
Forward Voltage @ $I_F = 1\text{A}$	$V_F$	0.875	1.25	V
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A = 25^\circ\text{C}$ 2	5	$\mu\text{A}$
		$T_A = 125^\circ\text{C}$ 250	250	
Reverse Recovery Time (Note1)	$t_{rr}$	25	50	ns
Typical Junction Capacitance(Note2)	$C_J$	13		pF
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	15		$\text{W}/^\circ\text{C}$
Operating Temperature Range	$T_J$	-55 to +150		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$			

### Note:

1. Measured With  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$
2. Measured at 1 MHz and applied reverse voltage of 4V DC.
3. Mounted on P.C. Board with  $8\text{mm}^2$  land area.
4. The typical data above is for reference only

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## Rating and Characteristic Curves

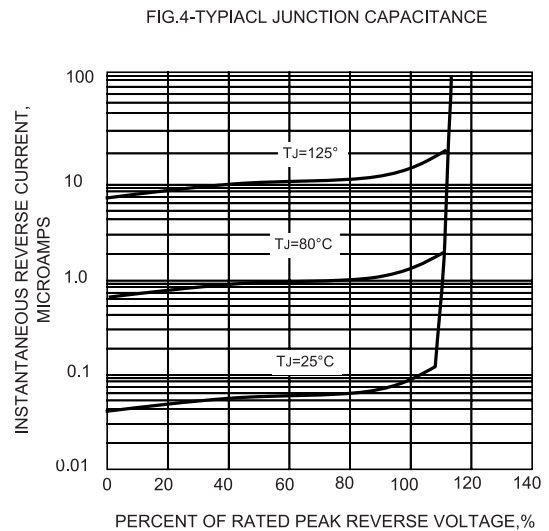
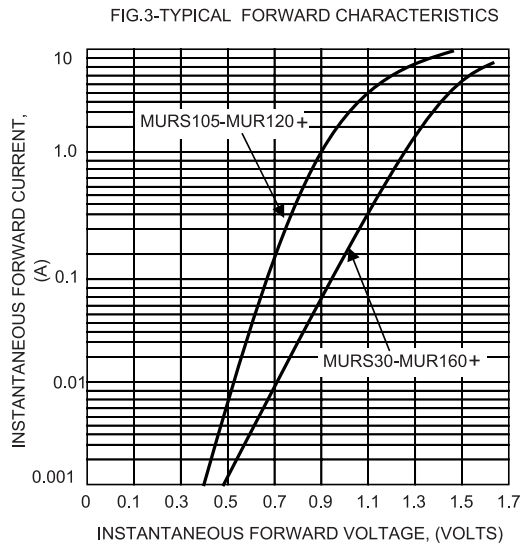
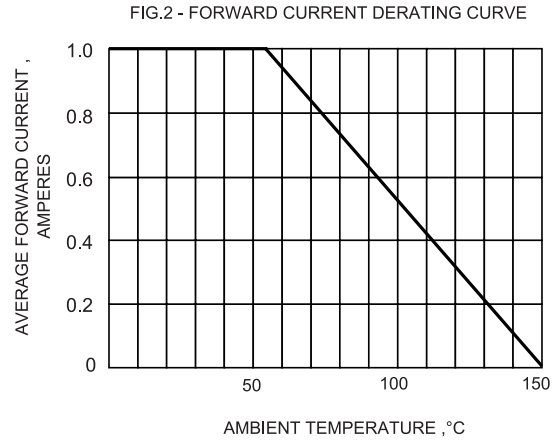
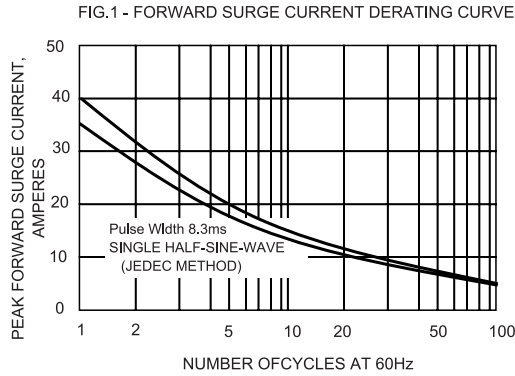
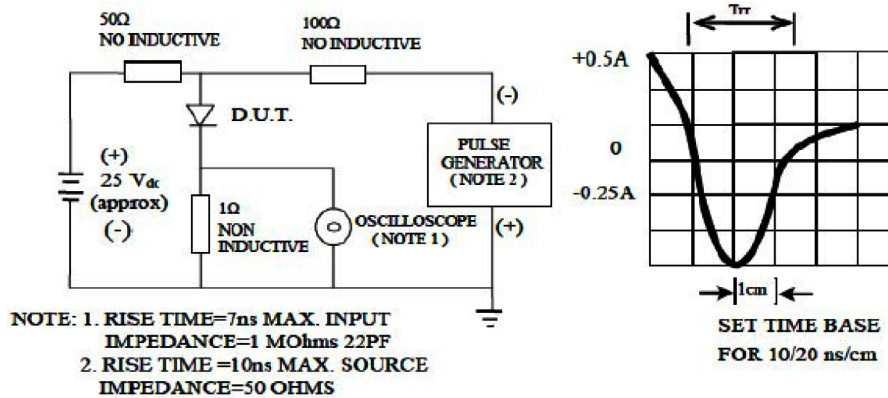


FIG.5 - REVERSE RECOVERY TIME CHARACTERISTIC TEST CIRCUIT

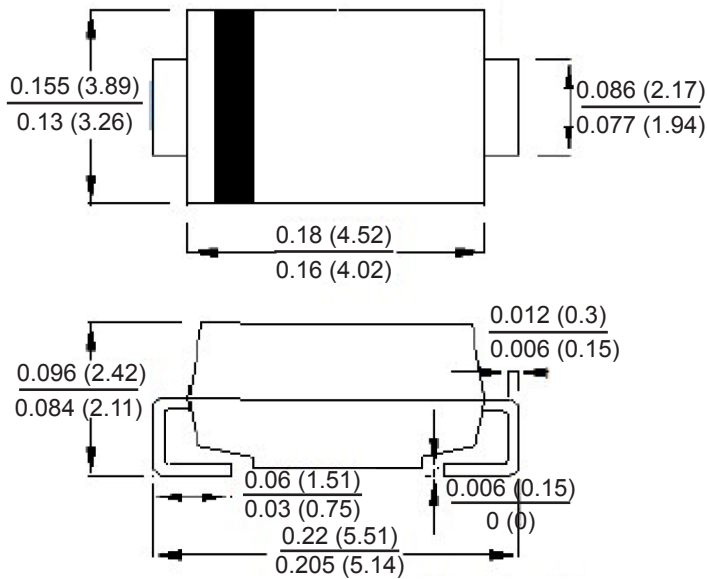


# Surface Mount Rectifier



## Dimensions:

### SMB/DO-214AA



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Rectifiers, 1A 200V SMB	MURS120+
Rectifiers, 1A 600V SMB	MURS160+

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