Surface Mount Rectifier

multicomp PRO

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°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	
Forword Voltage @I_F = 1A	V_F	0.875	1.25	V
Maximum Reverse Current at Rated DC Blocking Voltage T_A = 25°C T_A = 125°C	I_R	2 250	5 250	μA
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		W/°C
Operating Temperature Range	T_J	-55 to +150		°C
Storage Temperature Range	T_{STG}			

Note:

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

Rating and Characteristic Curves

FIG.1 - FORWARD SURGE CURRENT DERATING CURVE

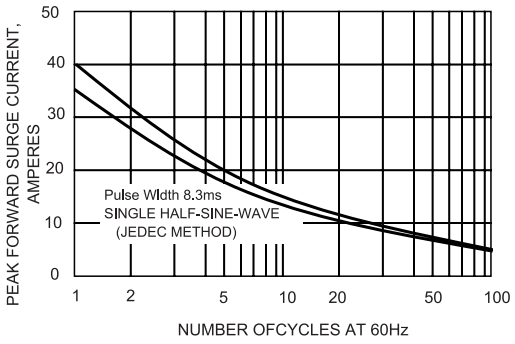


FIG.2 - FORWARD CURRENT DERATING CURVE

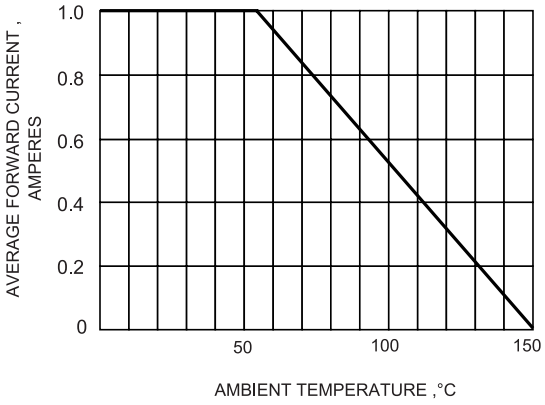


FIG.3-TYPICAL FORWARD CHARACTERISTICS

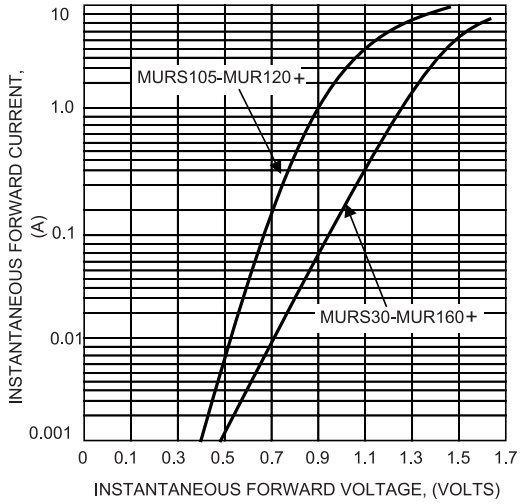


FIG.4-TYPIACL JUNCTION CAPACITANCE

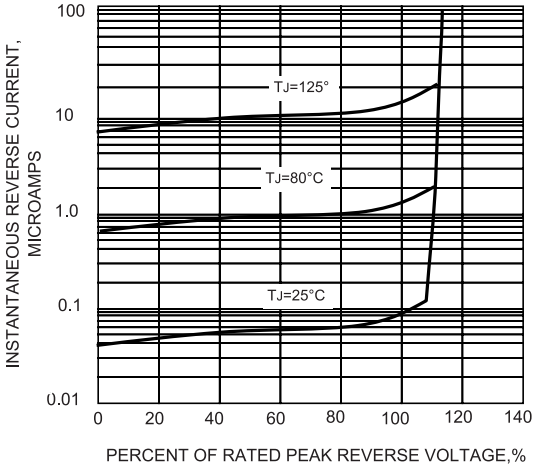
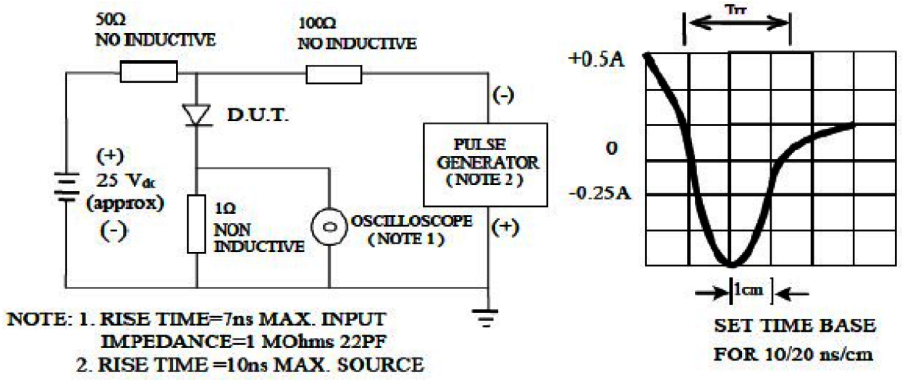


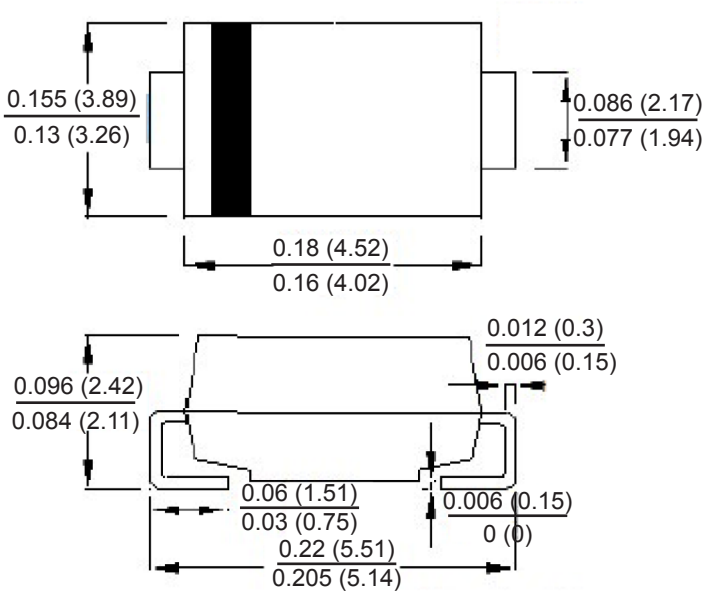
FIG.5 - REVERSE RECOVERY TIME CHARACTERISTIC ANG TEST CIRCUIT



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
2. RISE TIME =10ns MAX. SOURCE IMPEDANCE=50 OHMS

Dimensions:

SMB/DO-214AA



Dimensions : Inches (Millimetres)

Part Number Table

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