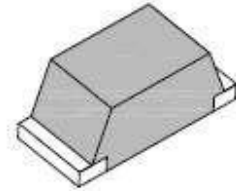


## Surface Mount Glass Passivated Rectifier

### Features

- Low leakage current
- For surface mounted applications
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound



**MFPT**

### Mechanical Data

<b>Case:</b>	JEDEC SOD-123F / MINI-SMA, Molded plastic body
<b>Terminals:</b>	Solder plated, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Indicated by cathode band
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.04 gram

### Maximum Ratings and Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Description	MFPT	MFPT	MFPT	MFPT	MFPT	MFPT	MFPT	Unit	Conditions
		05S	1S	2S	4S	6S	8S	10S		
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
<b>V<sub>R</sub></b>	Continuous Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>V<sub>F</sub></b>	Maximum Forward Voltage	1.1							V	
<b>I<sub>O</sub></b>	Forward rectified current	1							A	See Fig.1
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	30							A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
<b>I<sub>R</sub></b>	Reverse Current	5.0							uA	$V_R = V_{RRM}$ $T_A = 25^{\circ}\text{C}$
		50							uA	$V_R = V_{RRM}$ $T_A = 100^{\circ}\text{C}$

# 1.0A Surface Mount Glass Passivated Rectifier

## MFPT05S - MFPT10S

Symbol	Description	MFPT	MFPT	MFPT	MFPT	MFPT	MFPT	MFPT	Unit	Conditions
		05S	1S	2S	4S	6S	8S	10S		
RthJA	Thermal Resistance	60							°C / W	Junction to ambient
RthJC		30								Junction to case
CJ	Diode Junction Capacitance	15							pF	F = 1MHz and applied 4VDC reverse voltage
TJ, TSTG	Operating Junction and Storage Temperature Range	-55 to +150							°C	

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

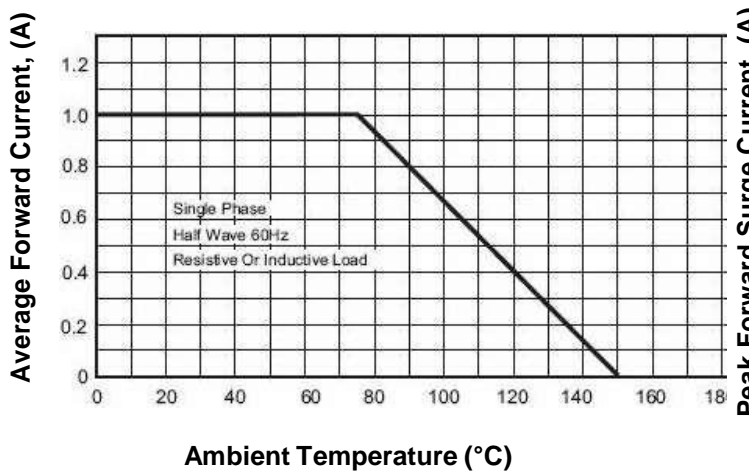
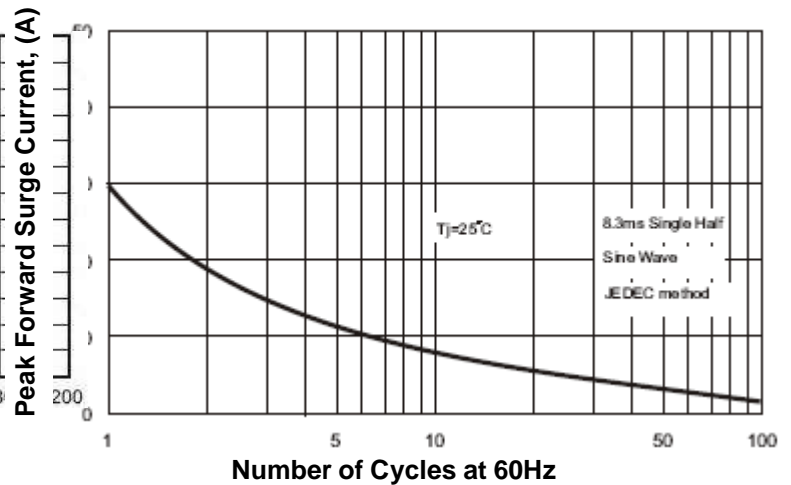


Fig.2- Maximum Non-Repetitive Forward Surge Current



# 1.0A Surface Mount Glass Passivated Rectifier

## MFPT05S - MFPT10S

Fig.3- Typical Forward Characteristics

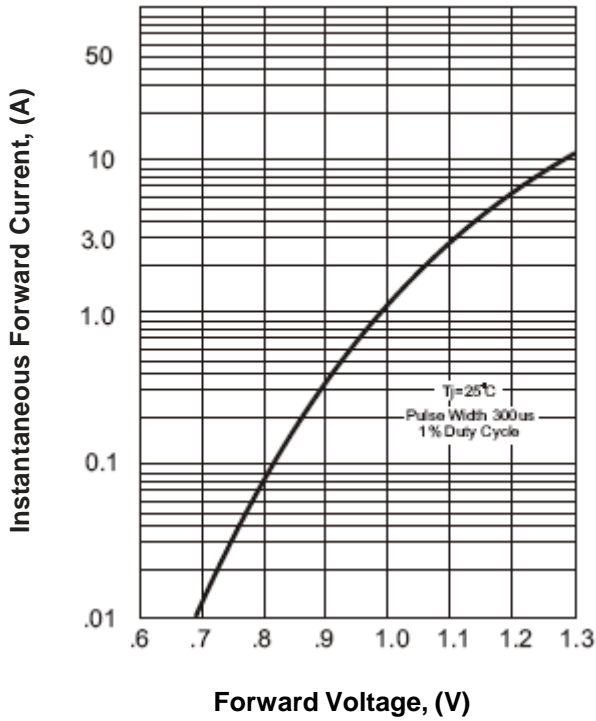


Fig.4- Typical Reverse Characteristics

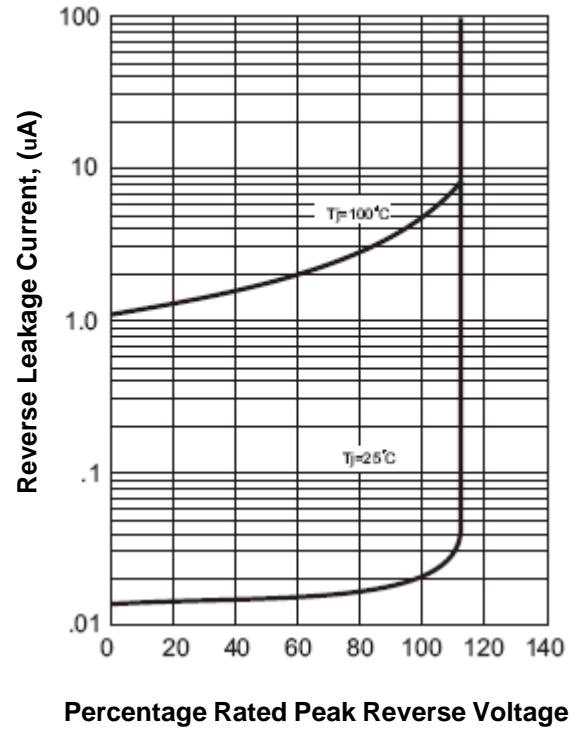
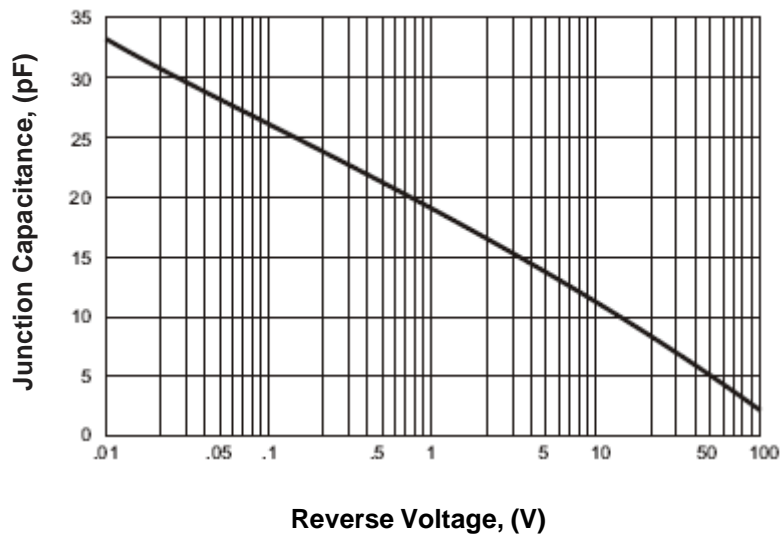


Fig.5-Typical Junction Capacitance

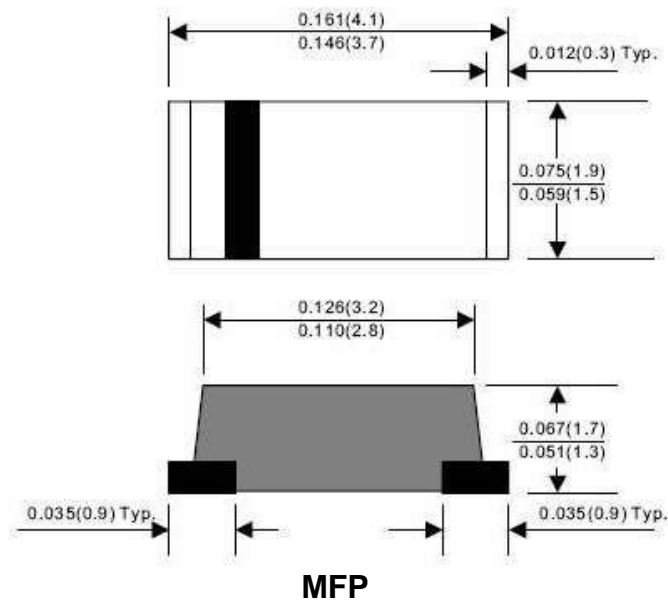


# 1.0A Surface Mount Glass Passivated Rectifier

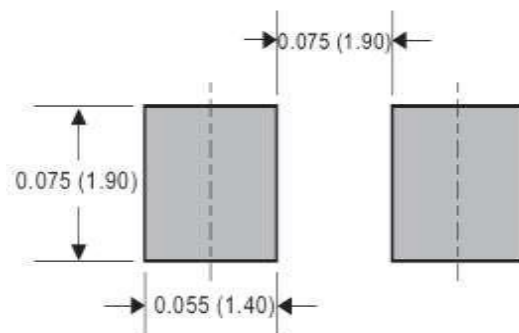
MFPT05S - MFPT10S

Dimensions in inches (mm)

SOD-123



Suggested Solder Pad Layout in inch (mm)



# 1.0A Surface Mount Glass Passivated Rectifier

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MFPT05S - MFPT10S

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