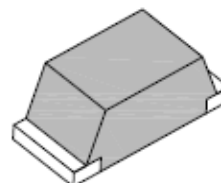


1.0A Surface Mount Low V_F Schottky Rectifier

Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance
- Low profile surface mounted application in order to optimize board space
- Tiny plastic SMD package
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guarding for overvoltage protection
- Ultra high-speed switching
- Silicon epitaxial planar chip, metal silicon junction
- RoHS Compliance



MFP



Mechanical Data

Case:	MFP/MINI-SMA, Molded plastic body
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Plated terminals, solderable per MIL-STD-750, Method 2026
Polarity:	Indicated by cathode band
Mounting Position:	Any
Weight:	Approximated 0.027gram

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

Symbol	Description	MFPS2L	MFPS3L	MFPS4L	Unit	Conditions
	Marking Code	L2	L3	L4		
V_{RRM}	Max. Repetitive Peak Reverse Voltage	20	30	40	V	
V_{RMS}	Max. RMS Voltage	14	21	28	V	
$I_{F(AV)}$	Average Forward Rectified Current	1.0			A	See Fig.1
I_{FSM}	Peak Forward Surge Current	30			A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
V_F	Max. Forward Voltage	0.38	0.40	0.40	V	$I_F=1.0\text{A}$

1.0A Surface Mount Low V_F Schottky Rectifier

MFPS2L - MFPS4L

Symbol	Description	MFPS2L	MFPS3L	MFPS4L	Unit	Conditions
I_R	Reverse Current @ $V_R = V_{RRM}$	1.0			mA	$T_A=25^\circ\text{C}$
		10			mA	$T_A=125^\circ\text{C}$
R_{thJA}	Thermal Resistance	42			$^\circ\text{C} / \text{W}$	Junction to ambient
C_J	Diode Junction Capacitance	130			pF	$V_R = 4\text{V}, f=1\text{MHz}$
T_J	Operating Temperature Range	-55 to +125			$^\circ\text{C}$	
T_{STG}	Storage Temperature Range	-65 to +175			$^\circ\text{C}$	

Rating and characteristic curves

Fig.1- Typical Forward Current Derating Curve

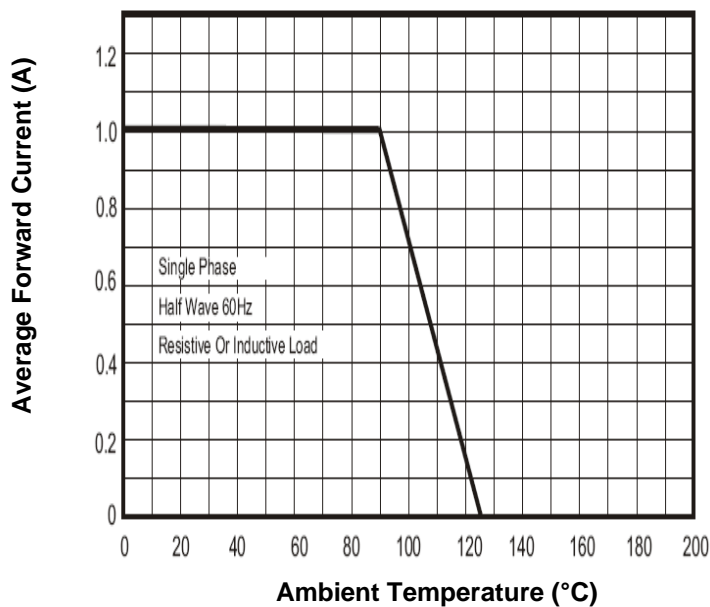
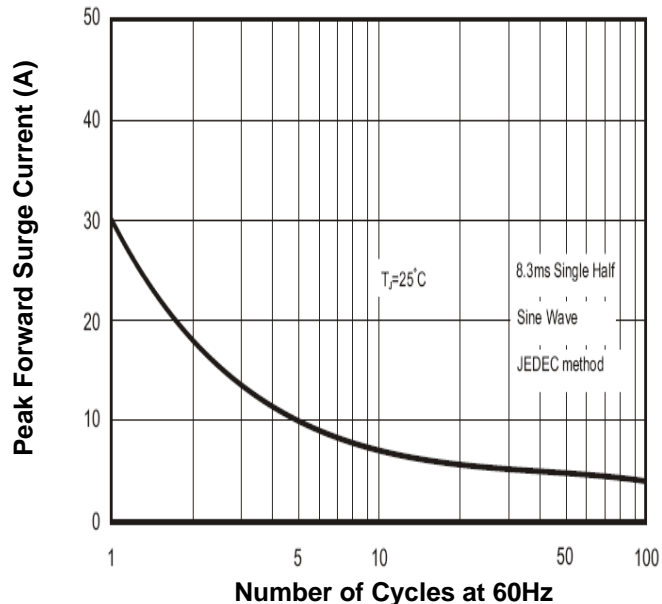


Fig.2-Max Non-Repetitive Peak Forward Surge Current



1.0A Surface Mount Low V_F Schottky Rectifier

MFPS2L - MFPS4L

Fig.3- Typical Instantaneous Forward Characteristics

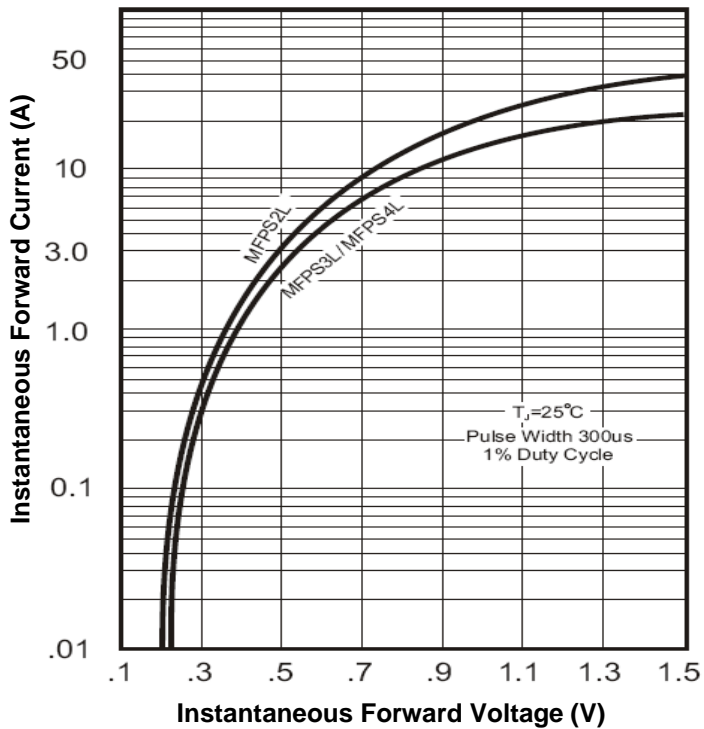


Fig.4-Typical Reverse Leakage Characteristics

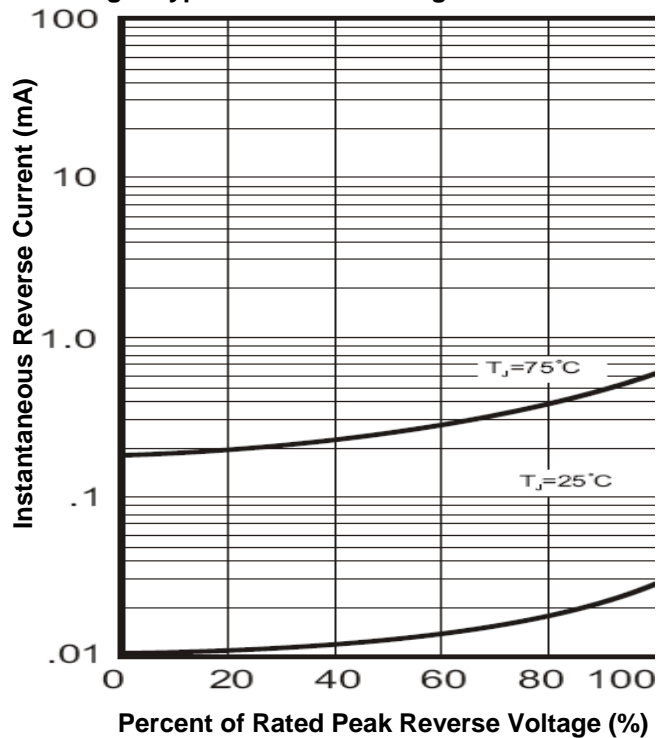
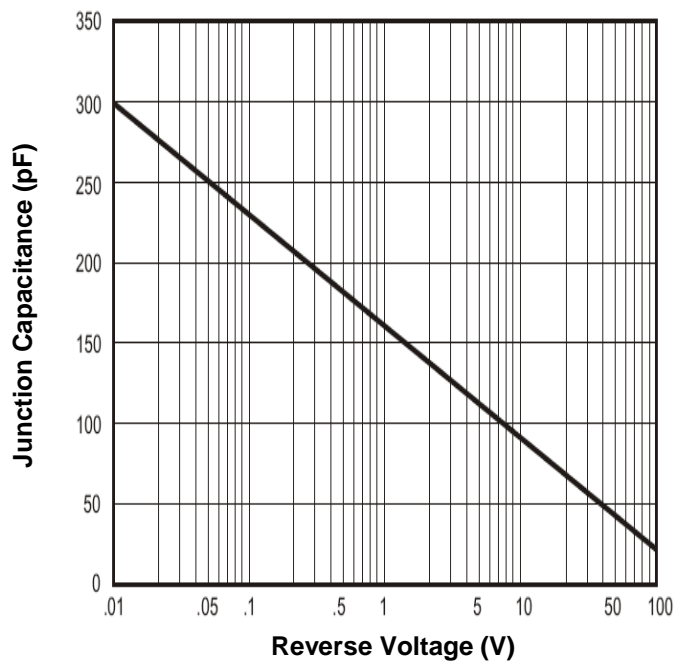


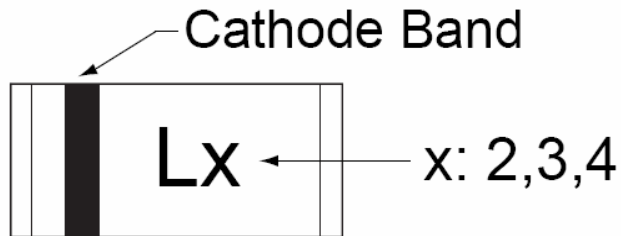
Fig.5-Typical Junction Capacitance



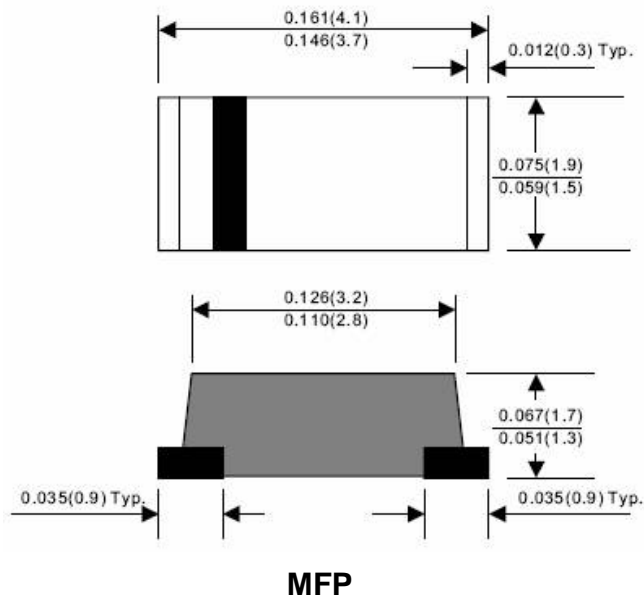
1.0A Surface Mount Low V_F Schottky Rectifier

MFPS2L - MFPS4L

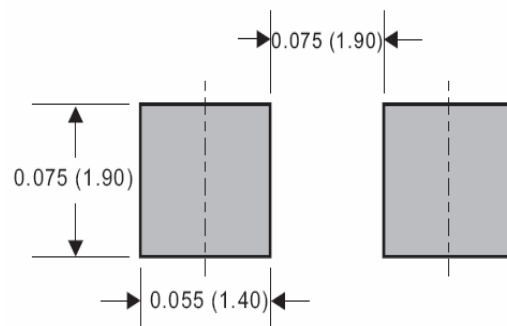
Marking Information:



Dimensions in inches (mm)



Suggested Solder Pad Layout in inch (mm)



1.0A Surface Mount Low V_F Schottky Rectifier

MFPS2L - MFPS4L

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