

# 1.0 Amp SMD SUPER FAST RECTIFIERS

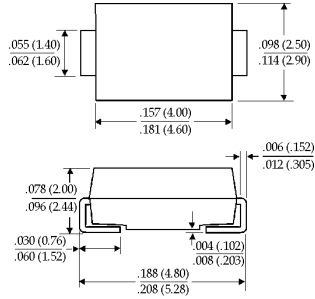
**UFS11 ... 16 Series**

## Description



## Mechanical Dimensions

**DO-214AC  
(SMA)**



## Features

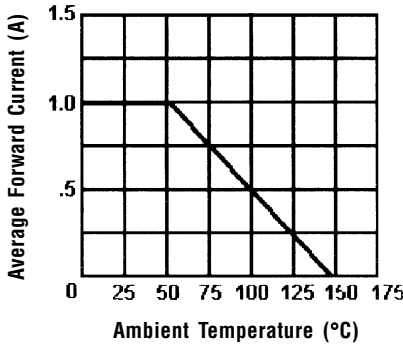
- HIGH SURGE CAPABILITY
- HIGH CURRENT CAPABILITY
- LOW FORWARD VOLTAGE DROP
- MEETS UL SPECIFICATION 94V-0

<b>UFS11 . . . 16 Series</b>					<b>Units</b>
<b>Maximum Ratings</b>	<b>UFS11</b>	<b>UFS12</b>	<b>UFS14</b>	<b>UFS16</b>	
Peak Repetitive Reverse Voltage... $V_{RRM}$	100	200	400	600	Volts
RMS Reverse Voltage... $V_{R(rms)}$	70	140	280	420	Volts
DC Blocking Voltage... $V_{DC}$	100	200	400	600	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ C$	1.0				Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Current & Temp	30				Amps
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 150				°C
<b>Electrical Characteristics</b>					
Maximum Forward Voltage @ 1.0A... $V_F$	.95	.95	1.3	1.5	Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	$T_A = 25^\circ C$		2.0		μAmps
	$T_A = 100^\circ C$		50		μAmps
Typical Junction Capacitance... $C_j$ (Note 2)	50				pF
Maximum Reverse Recovery Time... $t_{RR}$ (Note 1)	< 35		> 50		ns

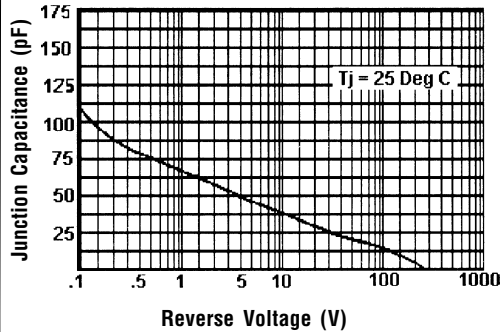
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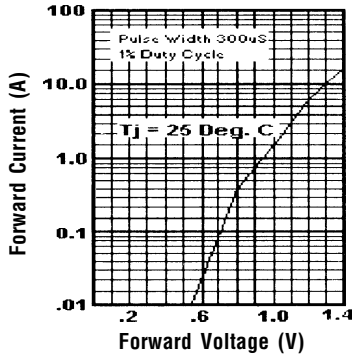
**Forward Current Derating Curve**



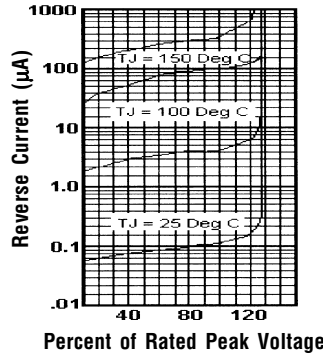
**Typical Junction Capacitance**



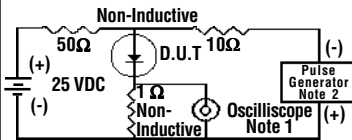
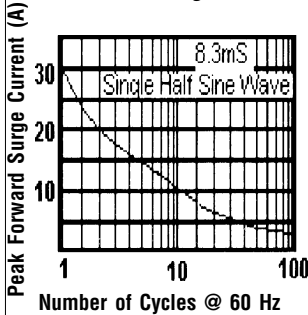
**Typical Instantaneous Forward Characteristics**



**Typical Reverse Characteristics**



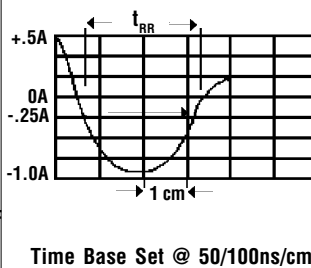
**Non-Repetitive Peak Forward Surge Current**



Notes:

1. Rise Time = 7 ns Max. Impedance = 1 megohm, 22 pF
2. Rise Time = 10 ns Max. Source Impedance = 50 Ohms

**Reverse Recovery Characteristics**



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 Hz Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

**NOTES:** 1.  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$   
2. Measured @ 1 MHz and applied reverse voltage of 4.0V.