

# 3.0 Amp SMD SUPER FAST RECTIFIERS

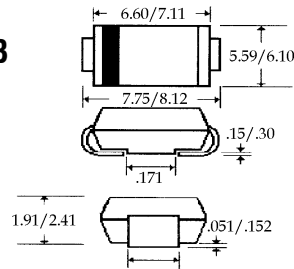
**UFS30 ... 36 Series**

## Description



## Mechanical Dimensions

**DO-214AB  
(SMC)**



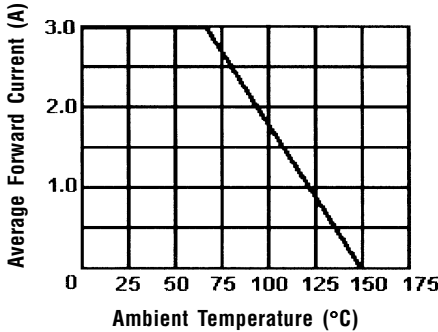
(Dimensions in mm)

## Features

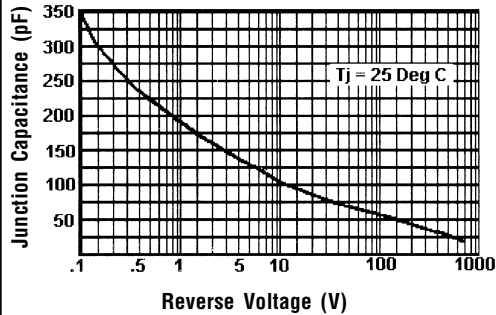
- **LOW COST**
- **LOW LEAKAGE**
- **HIGH SURGE CAPABILITY**
- **MEETS UL SPECIFICATION 94V-0**

<b>UFS30 . . . 36 Series</b>						<b>Units</b>
<b>Maximum Ratings</b>	<b>UFS30</b>	<b>UFS31</b>	<b>UFS32</b>	<b>UFS34</b>	<b>UFS36</b>	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	400	600	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	Volts
DC Blocking Voltage... $V_{DC}$	50	100	200	400	600	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ C$				3.0		Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Current & Temp				75		Amps
Operating & Storage Temperature Range... $T_J, T_{STRG}$				-65 to 150		°C
<b>Electrical Characteristics</b>						
Maximum Forward Voltage @ 3.0A... $V_F$	< ..... 0.95 ..... >			1.3	1.5	Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage				5.0		μAmps
Typical Junction Capacitance... $C_j$ (Note 1)				100		pF
Maximum Reverse Recovery Time... $t_{RR}$ (Note 2)	< ..... 35 ..... >			< ..... 50 ..... >		ns

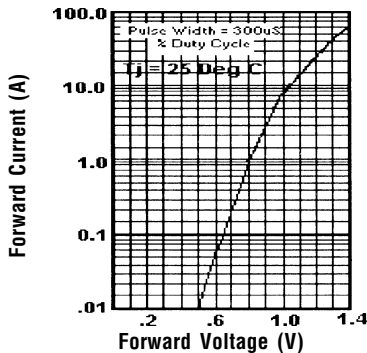
**Forward Current Derating Curve**



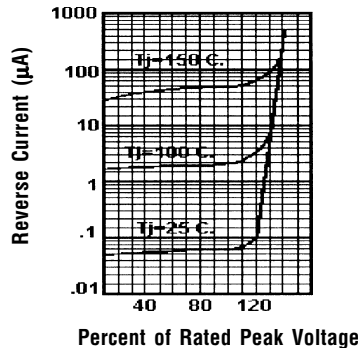
**Typical Junction Capacitance**



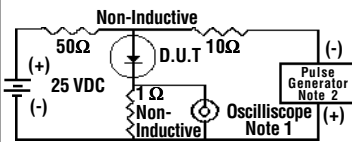
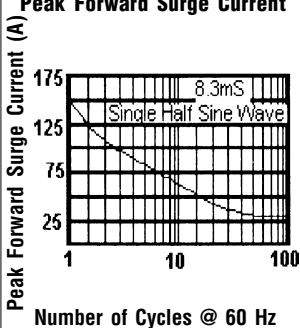
**Typical Instantaneous Forward Characteristics**



**Typical Reverse Characteristics**



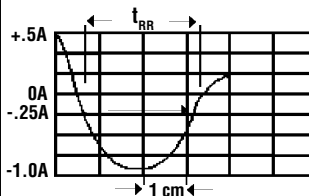
**Non-Repetitive Peak Forward Surge Current**



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. Measured @ 1 MHz and applied reverse voltage of 4.0V.  
2.  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{rr} = 0.25A$