

1.0 Amp SMD SUPER FAST RECTIFIERS

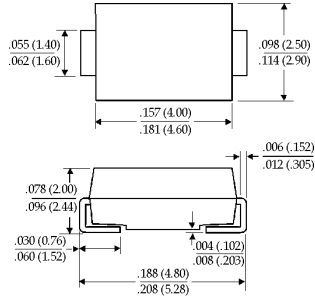
UFS11 ... 16 Series

Description



Mechanical Dimensions

**DO-214AC
(SMA)**

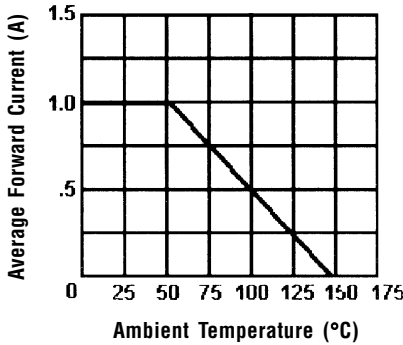


Features

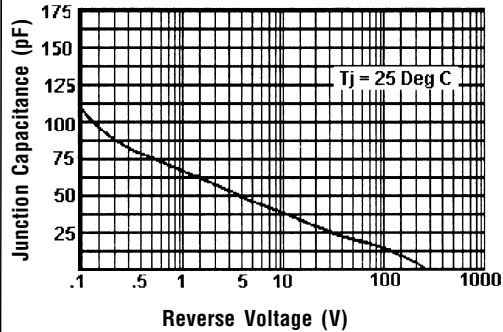
- HIGH SURGE CAPABILITY
- HIGH CURRENT CAPABILITY
- LOW FORWARD VOLTAGE DROP
- MEETS UL SPECIFICATION 94V-0

UFS11 ... 16 Series					Units
Maximum Ratings	UFS11	UFS12	UFS14	UFS16	
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... $I_{F(av)}$ $T_A = 55^\circ\text{C}$	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
Electrical Characteristics					
Maximum Forward Voltage @ 1.0A... V_F	.95	.95	1.3	1.5	Volts
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$		2.0		μAmps
	$T_A = 100^\circ\text{C}$		50		μAmps
Typical Junction Capacitance... C_j (Note 2)	50				pF
Maximum Reverse Recovery Time... t_{RR} (Note 1)	< 35 >		< 50 >		ns

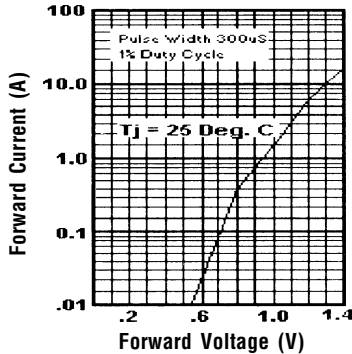
Forward Current Derating Curve



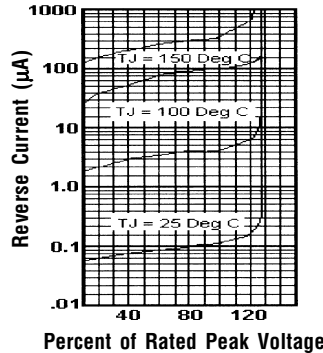
Typical Junction Capacitance



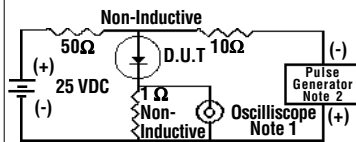
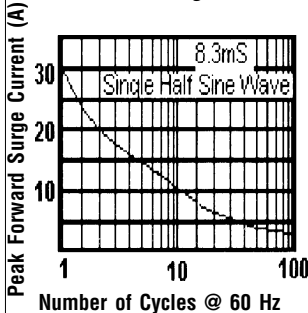
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



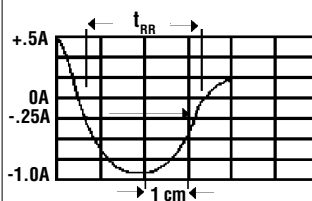
Non-Repetitive Peak Forward Surge Current



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