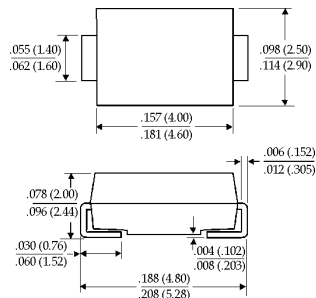


1.0 Amp FAST RECOVERY RECTIFIERS

Mechanical Dimensions

DO-214AC
(SMA)



Dimensions in inches and (millimeters)

Features

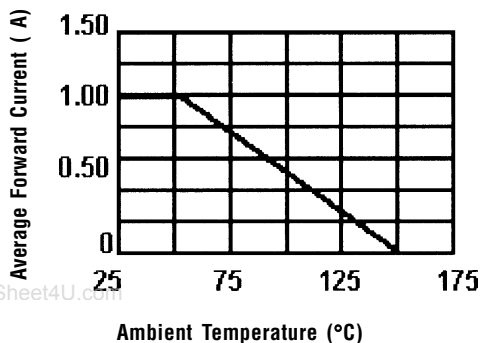
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 1.0 AMP OPERATION @ $T_A = 55^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

FRS10 . . . 110 Series								Units
Maximum Ratings	FRS10	FRS11	FRS13	FRS14	FRS16	FRS18	FRS110	
Peak Repetitive Reverse Voltage...V _{RRM}	50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage...V _{R(rms)}	35	70	140	280	420	560	700	Volts
DC Blocking Voltage...V _{DC}	50	100	200	400	600	800	1000	Volts
Average Forward Rectified Current...I _{F(av)} T _A = 55°C (Note 3)				1.0				Amps
Non-Repetitive Peak Forward Surge Current...I _{FSM} @ Rated Current & Temp				50				Amps
Operating & Storage Temperature Range...T _J , T _{STRG}				-65 to 150				°C
Electrical Characteristics								
Maximum Forward Voltage @ 1.0A...V _F				1.3				Volts
Maximum DC Reverse Current...I _R @ Rated DC Blocking Voltage	T _A = 25°C T _A = 100°C			5.0 100				μAmps μAmps
Typical Junction Capacitance...C _J (Note 1)				15				pF
Maximum Reverse Recovery Time...t _{RR}	150	150	150	150	250	500	500	ns

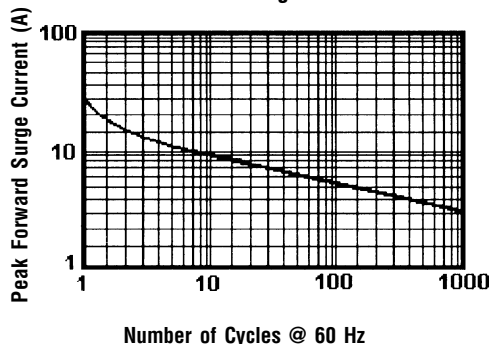
1.0 Amp FAST RECOVERY RECTIFIERS

FRS10... 110 Series

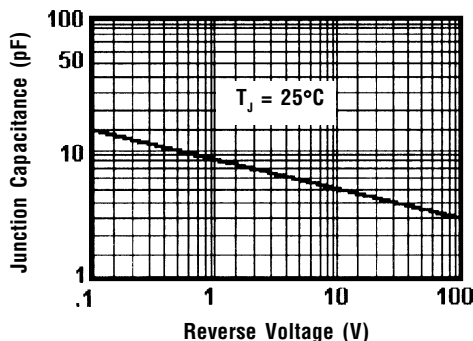
Forward Current Derating Curve



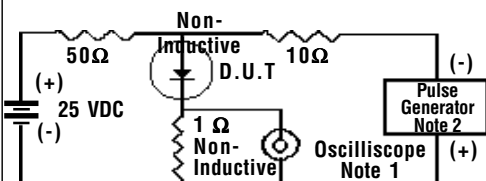
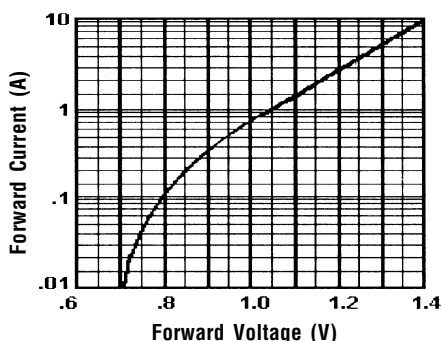
Non-Repetitive Peak Forward Surge Current



Typical Junction Capacitance

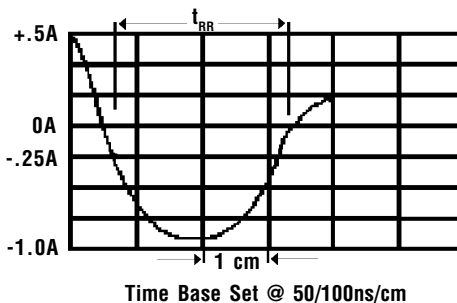


Typical Instantaneous Forward Characteristics



- 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. Thermal Resistance Junction to Ambient, Jedec Method.
3. PCB mounted on 5.0mm² (.013mm thick) copper pads.