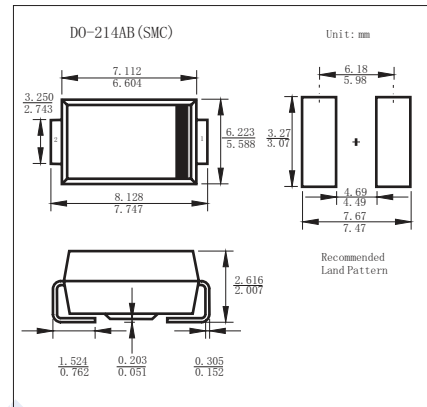


## Fast Recovery Rectifier

## FR8A ~ FR8M

## ■ Features

- For surface mounted applications
- Fast switching for high efficiency
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds at terminals

■ Absolute Maximum Ratings  $T_A = 25^\circ\text{C}$  unless otherwise specified

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbol	FR8A	FR8B	FR8D	FR8G	FR8J	FR8K	FR8M	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{(AV)}$	8.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200							
Maximum instantaneous forward voltage at 8.0A	$V_F$	1.3							V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5.0							$\mu\text{A}$
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	150				250	500		ns
Typical junction capacitance (NOTE 2)	$C_j$	120							pF
Typical thermal resistance (NOTE 3)	$R_{thJA}$	20							$^\circ\text{C}/\text{W}$
Junction Temperature	$T_j$	150							$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-65 to 150							

Notes: 1. Reverse recovery condition  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$

2. Measured at 1MHz and applied reverse voltage of 4V D.C

3. P.C.B. mounted with  $0.6 \times 0.6''$  ( $16 \times 16\text{mm}$ ) copper pad areas

# Fast Recovery Rectifier

## FR8A ~ FR8M

### Typical Characteristics

