



FAST SWITCHING SURFACE MOUNT RECTIFIER

Voltage

50~1000 V

Current

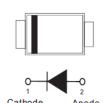
3 A

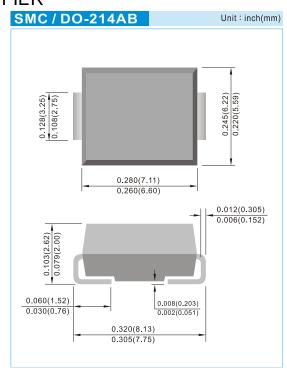
Features

- Plastic package has Underwriters Laboratories
 Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Fast Recovery times for high efficiency
- Glass passivated junction
- High temperature soldering : 260 °C /10 seconds at terminals
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: JEDEC DO-214AB Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging:16mm tape(EIA-481)
- Approx. Weight: 0.0082 ounces, 0.2325 grams
- Marking: Part number





Maximum Ratings ($T_A=25^{\circ}C$ unless otherwise noted)

PARAMETER	SYMBOL	FR3A	FR3B	FR3D	FR3G	FR3J	FR3K	FR3M	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum rms voltage	V_{RMS}	30	7	140	280	420	560	700	V
Maximum dc blocking voltage	V _R	50	100	400	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	3						А	
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100						А	
Maximum forward voltage at 3A	V _F	1.3					V		
Maximum dc reverse current T _J =25 °C		1							
at rated dc blocking voltage T _J =125 °C	I _R	200							μА
Maximum reverse recovery time (Note 1)	T _{RR}		15	50		250	5	00	nS
Maximum junction capacitance (Note 2)	C _J	60					pF		
Typical thermal resistance (Note 3)	R _{⊕JL}	15				°C/W			
Operating junction and storage temperature ran	ge T _J ,T _{STG}	-50 to +150				°C			

NOTES: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A

- 2. Measured at 1 MHz and applied V_R = 4 volts.
- 3. 8mm² (0.013mm thick) land areas.





RATING AND CHARACTERISTIC CURVES

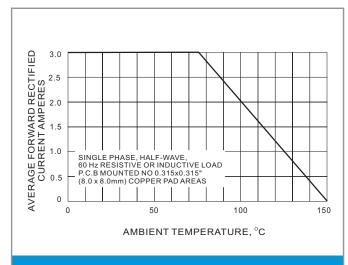
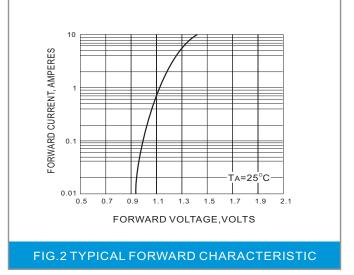


FIG.1 FORWARD CURRENT DERATING CURVE



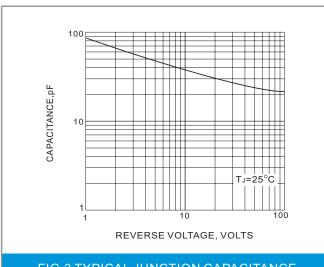


FIG.3 TYPICAL JUNCTION CAPACITANCE

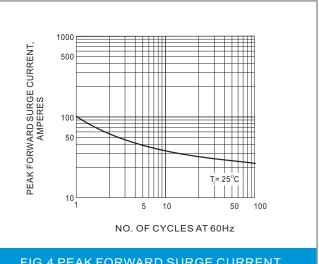
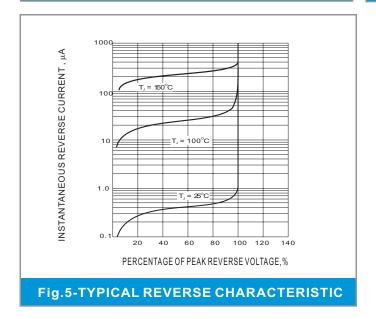


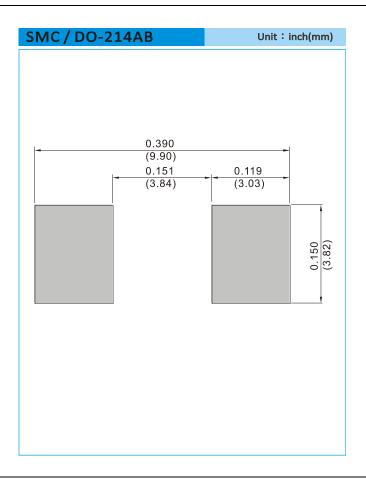
FIG.4 PEAK FORWARD SURGE CURRENT







MOUNTING PAD LAYOUT



ORDER INFORMATION

• Packing information

T/R – 3K per 13" plastic Reel

T/R - 0.8K per 7" plastic Reel

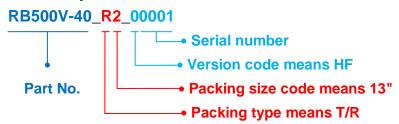




Part No_packing code_Version

FR3A_R1_00001 FR3A_R2_00001

For example :



Packing Code XX					Version Code XXXXX			
Packing type	1 st Code	Packing size code		HF or RoHS	1 st Code	2 nd ~5 th Code		
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number		
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number		
Bulk Packing (B/P)	В	13"	2					
Tube Packing (T/P)	Т	26mm	X					
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y					
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U					
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D					





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