



UF5GI / UF504IG

ULTRAFAST RECOVERY RECTIFIERS

Voltage

400 V

Current

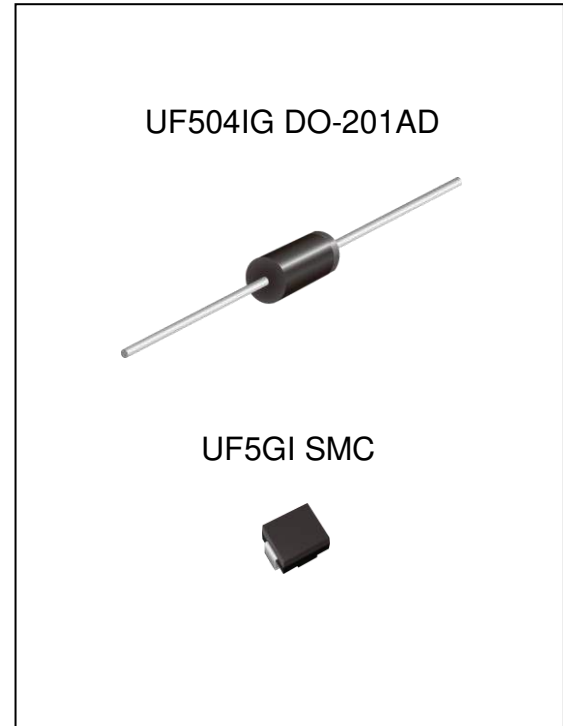
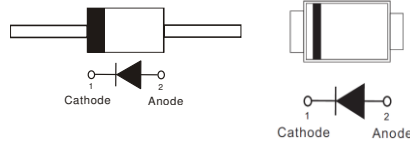
5 A

Features

- Silicon epitaxial high-speed diodes
- Soft recovery characteristics
- Low forward voltage, high current capability
- Hermetically sealed.
- Low leakage
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard (SMC)

Mechanical Data

- Case: Molded plastic, SMC, DO-201AD
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- SMC Approx. Weight: 0.0082 ounces, 0.2325 grams
- DO-201AD Approx. Weight: 0.04 ounces, 1.142 grams
- Marking: Part number



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

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	400	V
Maximum rms voltage	V_{RMS}	280	V
Maximum dc blocking voltage	V_R	400	V
Maximum average forward current	$I_{F(AV)}$	5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Maximum forward voltage at 5A	V_F	1.25	V
Maximum dc reverse current at rated dc blocking voltage	I_R	1	μA
Maximum reverse recovery time	(Note 4) T_{RR}	50	ns
Typical thermal resistance	SMC(Note 3) $R_{\theta JA}$	125	$^{\circ}\text{C/W}$
	SMC(Note 1) $R_{\theta JC}$	14	
	DO-201AD(Note 2) $R_{\theta JL}$	24	
Operating and storage temperature range	T_J, T_{STG}	-55 to +150	$^{\circ}\text{C}$

Note : 1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

2. The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two 10cm x 10cm x 0.5mm copper pad

3. Mounted on a FR4 PCB, single-sided copper, mini pad.

4. Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=1\text{A}$, Recover to 0.25A



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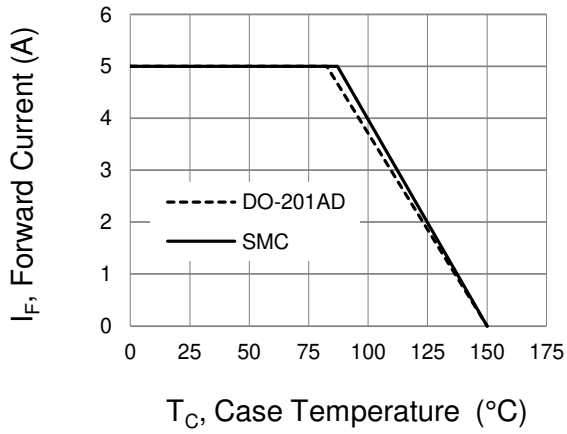


Fig.1 Forward Current Derating Curve

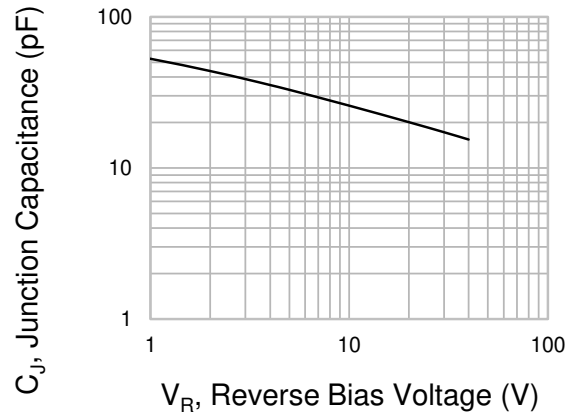


Fig.2 Typical Junction Capacitance

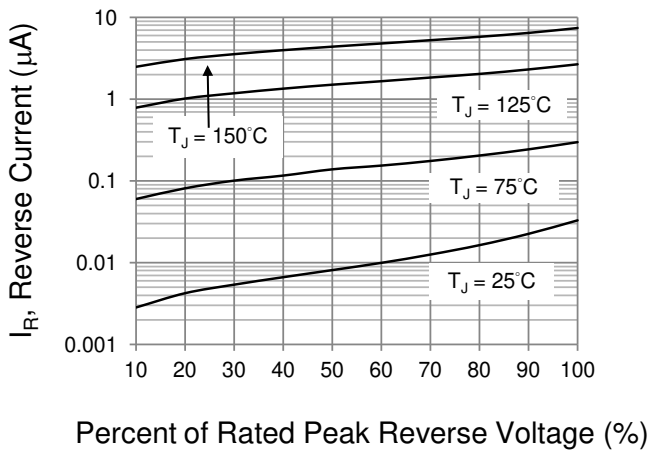


Fig.3 Typical Reverse Characteristics

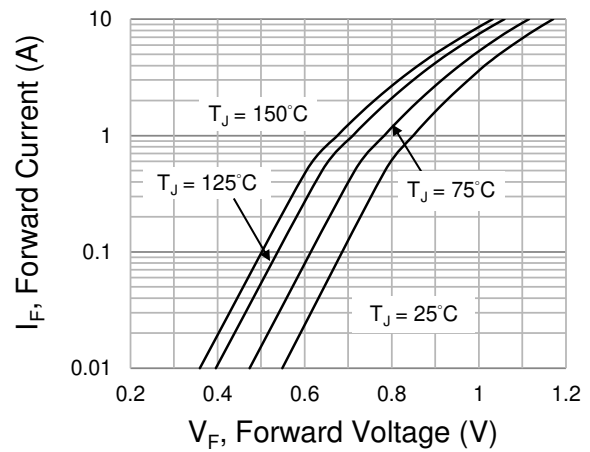


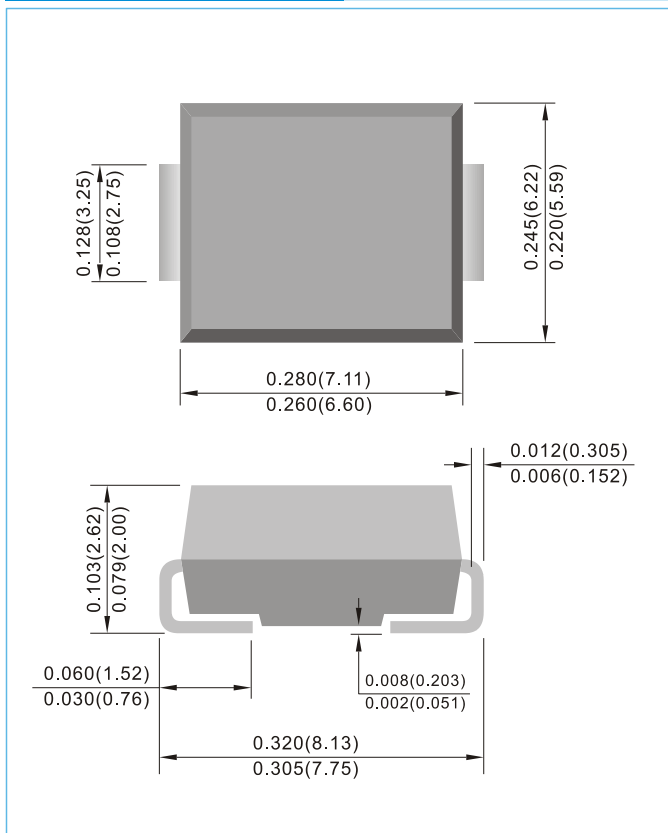
Fig.4 Typical Forward Characteristics



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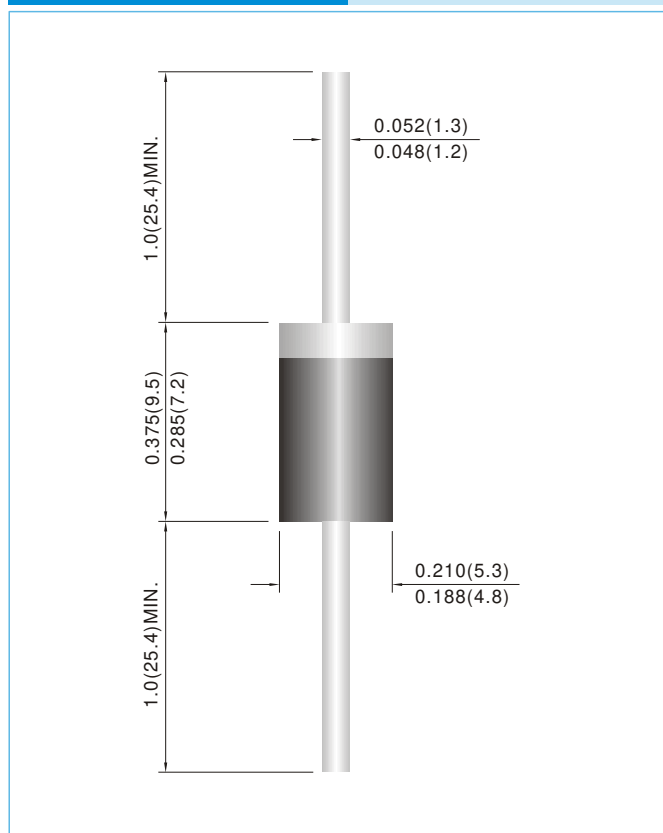
SMC / DO-214AB

Unit : inch(mm)



DO-201AD

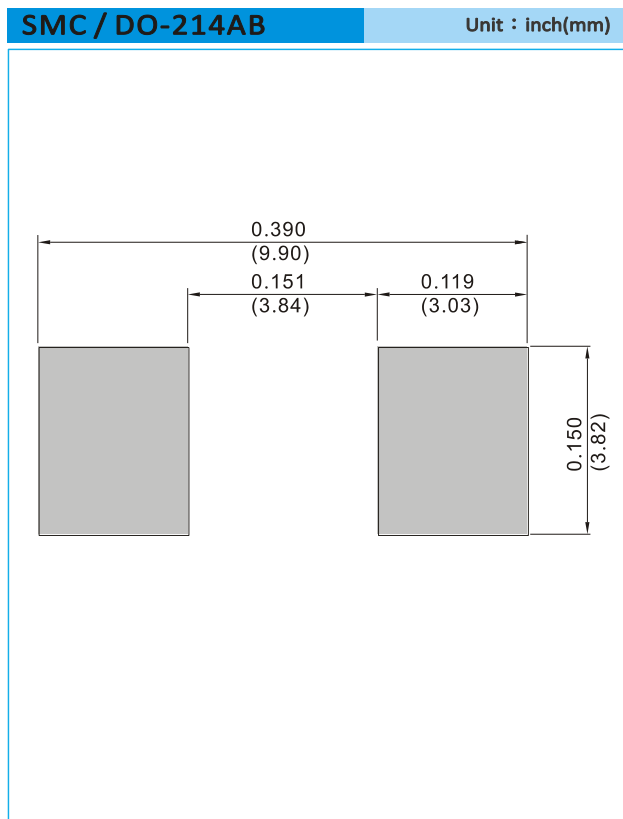
Unit : inch(mm)





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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R – 3K per 13" plastic Reel
 - T/R – 0.8K per 7" plastic Reel



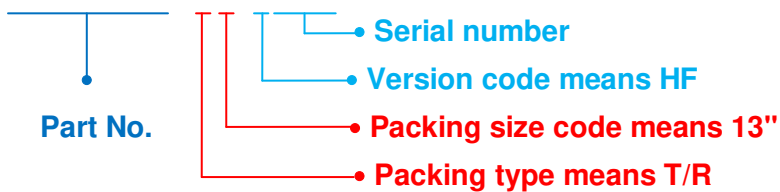
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Part No_packing code_Version

- UF504IG_AY_00001
- UF504IG_AY_10001
- UF504IG_B0_00001
- UF504IG_B0_10001
- UF504IG_R2_00001
- UF504IG_R2_10001
- UF5GI_R1_00001
- UF5GI_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd 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)	B	13"	2			
Tube Packing (T/P)	T	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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