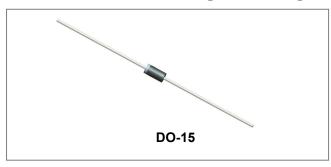






FR201 THRU FR207 FAST RECOVERY RECTIFIERS



Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.40 grams

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	FR 201	FR 202	FR 203	FR 204	FR 205	FR 206	FR 207	Units
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	V _{RRM} V _{DC}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at @T _A =55°C	I _(AV)	2.0				А			
Peak forward surge current 8.3ms single half sinewave superimposed on rated load (JEDEC Method)	I _{FSM}	60				А			
Maximum instantaneous forward voltage at 2.0A	V _F	1.2				V			
Maximum DC reverse current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	5.0 100				μA			
Maximum reverse recovery time (Note 1)	t _{rr}	150		250	5	00	ns		
Typical Junction Capacitance (Note 2)	Сл	30			pF				
Typical Thermal Resistance Junction to Ambient (Note 3)	R _{θJA}	40			°C/W				
Operating junction temperature range	TJ	-55 to +125			°C				
Operating storage temperature range	T _{STG}	-55 to +150			°C				

*Glass passivated forms are available upon request

- Note: 1. Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A
 - 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 - 3. Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length, P.C.B. mounted
 - China Germany Korea Singapore United States
 - http://www.smc-diodes.com
 sales@ smc-diodes.com







Ratings and Characteristics Curves

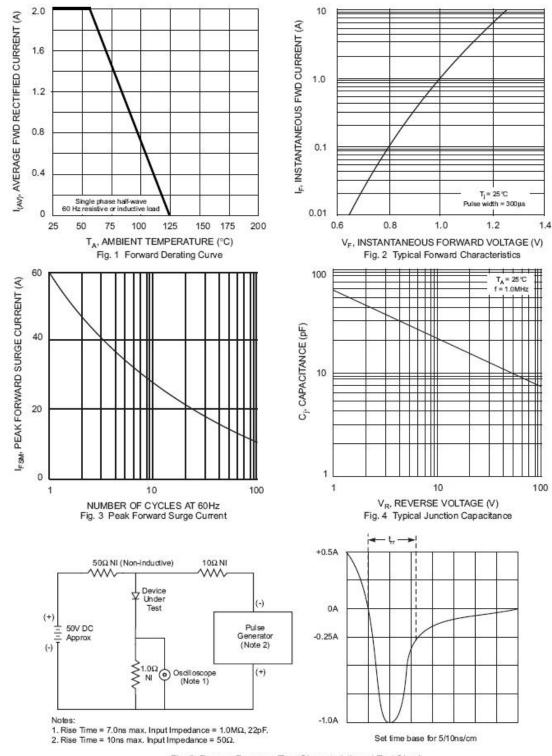


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

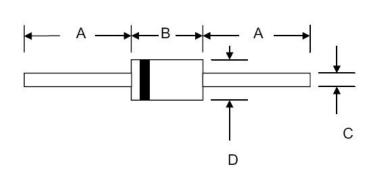
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Mechanical Dimensions DO-15



SYMBOL	Millim	neters	Inches			
OT MIDDE	Min.	Max.	Min.	Max.		
А	25.4	-	1.000	-		
В	5.5	7.62	0.217	0.300		
С	0.7	0.9	0.028	0.034		
D	2.6	3.6	0.104	0.140		

Ordering Information

Device	Package	Shipping
FR201-FR207	DO-15 (Pb-Free)	3000pcs /tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

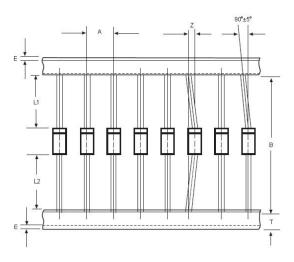


Where XXXXX is YYWWL

FR207 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin Epoxy resin UL:94V-0

Carrier Tape Specification DO-15



SYMBOL	Millimeters			
	Min.	Max.		
А	4.50	5.50		
В	50.9	53.9		
Z	-	1.20		
Т	5.60	6.40		
E	-	0.80		
IL1-L2I	-	1.0		

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