

Surface Mount Glass Passivated Standard Rectifier Reverse Voltage 50~1000V Forward Current 3A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- · Buili-in strain relief, ideal for automated placement
- Glass passivated chip junction
- For use of general purpose rectification





DO-214AA (SMB)

Mechanical Data

- · Case: JEDEC DO-214AA(SMB) molded plastic body over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- High temperature soldering: 260°C,10 seconds at terminals
- Polarity: Color band denotes cathode end
- Weight:0.003 ounce,0.093gram

Maximum Ratings and Electrical Characteristics

(TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	GN3AB	GN3BB	GN3DB	GN3GB	GN3JB	GN3KB	GN3MB	Unit	
Maximum repetitive peak reverse voltage		VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS voltage		VRMS	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage		VDC	50	100	200	400	600	800	1000	V	
Maximum average forward rectified current at TL(See Fig.1)		IF(AV)	3.0							A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		IFSM	100						A		
Rating for fusing (t<8.3ms,single half sine-wave)		l ² t	42							A ² S	
Peak forward surge current 1 ms single square wave superimposed on rated load		IFSM	220						А		
Rating for fusing(t<1ms,single square wave)		l ² t	48.4							A ² S	
Maximum instantaneous forward voltage	3.0A	V_{F}				1.15				Volts	
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	I _R	10.0								
	TA=125℃		250							μΑ	
Maxinmum reverse recovery time at	IF=0.5A,IR=1.0A,Irr= 0.25A	t _{rr}	3.0				uS				
Typical thermal resistance ¹⁾	juntion to ambient	$R_{ extsf{ heta}JA}$	47							°C/W/	
	juntion to lead	$R_{ extsf{ heta}JL}$				13				C/VV	
Typical junction capacitance	4.0 V, 1 MHz	CJ	22				pF				
Operating junction and storage temperature range		TJ, TSTG	- 55 to + 150							°C	

Note:1),The thermal resistance from junction to ambient,case or lead,mounted on P.C.B with 8.0x8.0mm copper pads



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Figure 5. Typical Junction Capacitance





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Package Outline Dimensions

in inches (millimeters)



Mounting Pad Layout



Packing Information

Packing quantities: 3000 pcs/Reel, 18 Reels/Box; 12mm Tape, 13" Reel

Tape & Reel Specification



Symbols	SMB (mm)
W	12 ± 0.2
Е	1.75 ± 0.1
F	5.5 ± 0.05
DO	1.5 ± 0.1
D1	1.50 +0.1/-0
P0	4.0 ± 0.1
P1	8.0 ± 0.1
P2	2.0 ± 0.05
AO	3.95 ± 0.1
BO	5.74 \pm 0.1



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