

GOOD-ARK Electronics

2A,50-1000V Fast Recovery Rectifiers

Features

- Low leakage current
- Low forward voltage drop
- Glass passivated chip junction
- Moisture sensitivity: level 1, per J-STD-020
- Halogen-free according to IEC 61249-2-21 definition



SMB (DO-214AA)

Applications

For use of fast switching rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

Maximum Ratings & Electrical Characteristics(TA=25°C unless otherwise noted)									
Parameter	Symbol	GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M	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	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	>
Maximum average forward rectified current	I _{F(AV)}	2					Α		
Peak forward surge current,8.3ms single half sine- wave superimposed on rated load per diode	I _{FSM}	55					A		
Operating junction temperature range	TJ	-55 to +150					°C		
Storage temperature range	Tstg	-55 to +150					°C		

Thermal-Mechanical Specifications (TA=25°C unless otherwise noted)							
Parameter	Symbol	Тур	Unit				
Thermal Resistance, Junction to Ambient	R _θ JA	85	°C /W				
Thermal Resistance, Junction to Case	Rejc	15	°C /W				
Thermal Resistance, Junction to Lead	ReJL	20	°C /W				

GR2A thru GR2M GOOD-ARK Electronics

Electrical Specifications(TA=25°C unless otherwise noted)										
Parameter	Symbol	Test Conditions	GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M	Unit
Forward Drop Voltage	V _F	I _F =2A	1.3					٧		
Reverse leakage I _R current @V _R	T _J =25°C	5						uA		
	IR	T _J =125°C	200						uA	
Typical junction capacitance	CJ	4.0 V 1 MHZ	50					pF		
Maximum reverse recovery time	trr	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	150 250 500					00	nS	

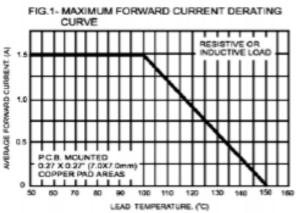
Note:

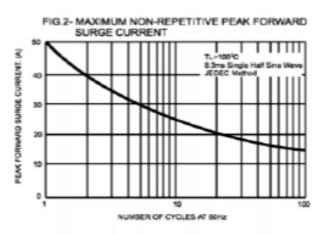
1. Mounted on copper pad area of 0.2x0.2" (5.0 x 5.0mm) to each terminal.

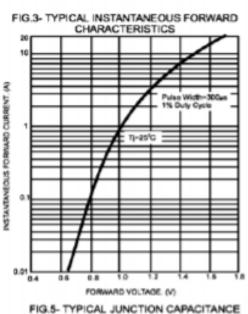
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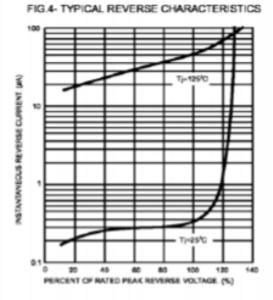
Ratings and Characteristics Curves

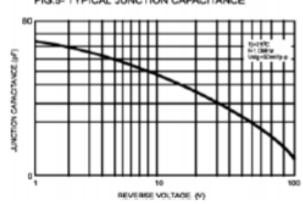
(TA = 25°C unless otherwise noted)









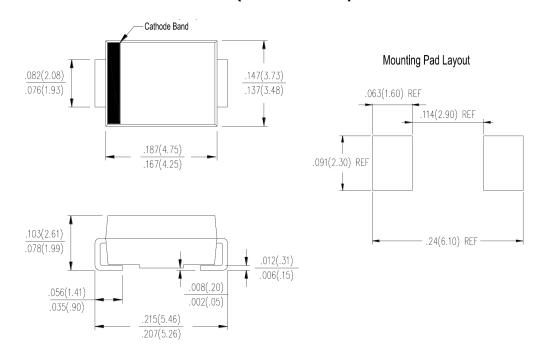


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Package Outline Dimensions

in inches (millimeters)

SMB (DO-214AA)



Revision History

Document Version	Date of release	Description of changes				
Rev.A	2021.06.01	Released Datasheet				
Rev.B	2023.10.13	Modify document format				



GR2A thru GR2M

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