

Silicon Schottky Diodes

Rev. V1

Features

- Fast Switching
- High Breakdown Voltage

Description

The MGR-700 Series are general purpose Schottky barrier diodes specially designed to achieve a high voltage breakdown. This series of diodes can be used in the UHF and VHF frequency bands for pulse shaping, sampling and as fast logic gates.



Bare Die

Electrical Specifications: $T_A = 25^\circ\text{C}$

Model	Voltage Breakdown (V_B)	Forward Voltage (V_F)	Junction Capacitance (C_J)	Leakage Current (I_R)
	I_R 10 μA	1 mA	@ 0 Vdc, 1 MHz	80% V_B
	V	V	pF	nA
	Min.	Typ.	Max.	Max.
MGR700	8	0.34	1.2	100
MGR701	8	0.34	1.0	100
MGR702	20	0.55	1.2	100
MGR703	20	0.41	1.0	100
MGR704	70	0.41	2.0	200
MGR705	70	0.41	1.2	200

Absolute Maximum Ratings

Parameters	Rating
Reverse Voltage	See Voltage Ratings
Operating Temperature	-55°C to $+150^\circ\text{C}$
Storage Temperature	-65°C to $+200^\circ\text{C}$

MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.