

# CD5817 thru CD5819, CD6759 thru CD6761, CD1A20 thru CD1A100



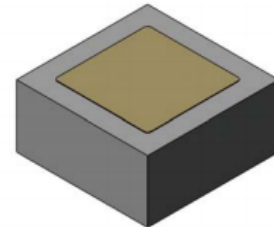
## Schottky Barrier Rectifier Chip Series

Rev. V1

### Features

- 1 Amp Schottky Barrier Rectifier Chips
- Silicon Dioxide Passivated
- Compatible With All Wire Bonding and Die Attach Techniques (with the exception of solder reflow)

### Die



### Description

The silicon Schottky barrier rectifier chip series offers a large reverse breakdown voltage with low forward voltage. This die has an advanced high-reliability passivation for very fast settling time and low leakage current.

This Schottky diode is designed to be used in wide variety of applications, such as in high frequency rectifiers, reverse polarity protection and more.

CD5819 and CD6761 available in JANHC and JANKC per MIL-PRF-19500/586.

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

Part #	Working Peak Reverse Voltage	Maximum Forward Voltage		Maximum Reverse Leakage Current @ Rated Voltage	
	$V_{RWM}$	$V_F @ 0.1 \text{ A}$	$V_F @ 1.0 \text{ A}$	$I_R @ 25^\circ\text{C}$	$I_R @ 100^\circ\text{C}$
	V	V		mA	
CD5817	20	0.36	0.60	0.10	5.0
JHC, JKC 5817	20	0.32	0.45	0.07	5.0
CD5818	30	0.36	0.60	0.10	5.0
CD5819	40	0.36	0.60	0.10	5.0
JHC, JKC 5819	45	0.34	0.49	0.05	5.0
CD6759	60	0.38	0.75	0.10	6.0
CD6760	80	0.38	0.75	0.10	6.0
CD6761	100	0.38	0.75	0.10	6.0
JHC, JKC 6761	100	0.38	0.69	0.10	12.0
CD1A20	20	0.36	0.60	0.10	5.0
CD1A30	30	0.36	0.60	0.10	5.0
CD1A40	40	0.36	0.60	0.10	5.0
CD1A50	50	0.36	0.60	0.10	5.0
CD1A60	60	0.38	0.75	0.10	12.0
CD1A80	80	0.38	0.75	0.10	12.0
CD1A100	100	0.38	0.75	0.10	12.0

1 \* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

# CD5817 thru CD5819, CD6759 thru CD6761, CD1A20 thru CD1A100



## Schottky Barrier Rectifier Chip Series

Rev. V1

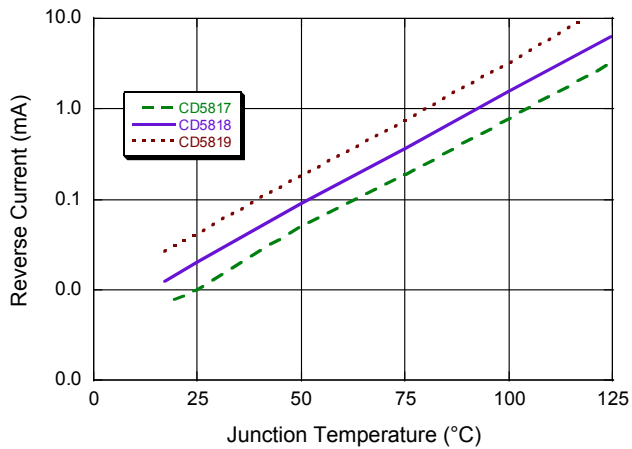
### Absolute Maximum Ratings<sup>4,5</sup>

Parameter	Absolute Maximum
Average Rectified Forward Current	1.0 A @ -55°C
Derating	14.3 mA/°C above +55°C
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +150°C

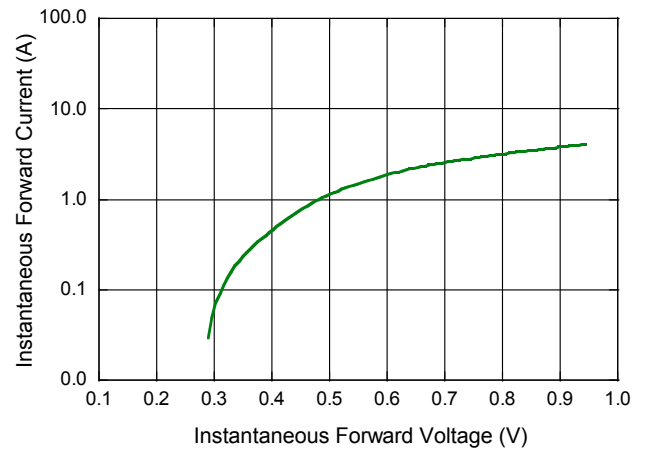
4. Exceeding any one or combination of these limits may cause permanent damage to this device.

5. MACOM does not recommend sustained operation near these survivability limits.

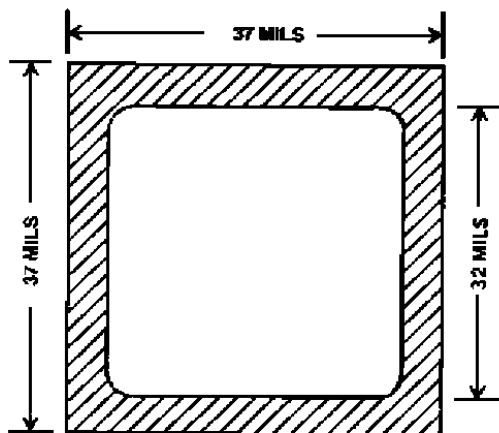
### Reverse Leakage Current @ Rated PIV (pulsed) vs. Temperature



### Forward Current vs. Forward Voltage



### Die



Metallization: Top: (anode) AL  
Back: (cathode) Au  
AL Thickness: 25,000 Å Minimum  
Gold Thickness: 4,000 Å Minimum  
Chip Thickness: 10 mils  
Tolerances: All dimensions ±2 mils

**BACKSIDE IS CATHODE**

# CD5817 thru CD5819, CD6759 thru CD6761, CD1A20 thru CD1A100



## Schottky Barrier Rectifier Chip Series

Rev. V1

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.