



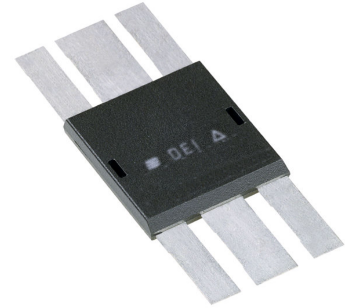
Silicon Carbide Schottky Diode

V_{RRM} = 1200 V

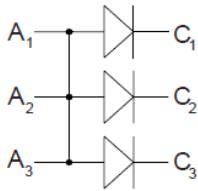
I_{F(AVG)} = 5 A

C_J = 65 pF

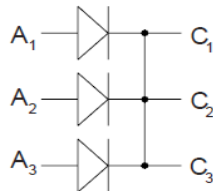
| Part Number | V _{RRM} (V) | I _{F(AVG)} (A) | Configuration |
|--------------|----------------------|-------------------------|-----------------------|
| SS275TA12205 | 1200 | 5 | Triple Common Anode |
| SS275TC12205 | 1200 | 5 | Triple Common Cathode |
| SS275TI12205 | 1200 | 5 | Triple Independent |



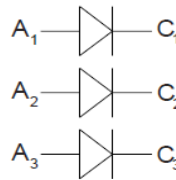
Triple Anode (TA)



Triple Cathode (TC)



Triple Independent (TI)



A = Anode C = Cathode

| Symbol | Parameter | Test Conditions | Maximum Ratings | |
|---------------------|--|---|-----------------|----|
| V _{RRM} | Repetitive Peak Reverse Voltage | | 1200 | V |
| V _{RSM} | Repetitive Surge Reverse Voltage | | 1200 | V |
| V _{DC} | DC Blocking Voltage | | 1200 | V |
| I _{F(AVG)} | Average Forward Current | T _J = 175°C | 5 | A |
| I _{FRM} | Repetitive Peak Forward Surge Current | T _{VJ} = 45°C, t _p = 8 ms Half Sine Wave D = 0.3 | 12 | A |
| T _{VJ} | Operating Virtual Junction Temperature | | -55 to +175 | °C |
| T _{STG} | Storage Temperature | | -55 to +175 | °C |
| P _{TOT} | T _C = 25 °C (10 W/device) | | 30 | W |

Features

- 1200 V SiC Schottky Diode
- Surface Mount Package
- Zero Reverse Recovery
- Zero Forward Recovery
- High Frequency Operation
- Temperature Independent Behavior
- Positive Temperature Coefficient for V_F

Applications

- MHz Switch Mode Power Supplies
- High Frequency Converters
- Resonant Converters
- Rectifier Circuits

| Symbol | Parameter | Test Conditions | Characteristic Values | | |
|--|--------------------------------|--|-----------------------|-------------|------------------|
| | | | Typ. | Max. | Units |
| T _J = 25°C unless otherwise specified | | | | | |
| V _F | Forward Voltage | I _F = 5 A, T _J = 25°C T _J = 175°C | 1.6 2.6 | 1.8 3 | V |
| I _R | Reverse Current | V _R = 1200 V, T _J = 25°C T _J = 175°C | 50 100 | 200 1000 | µA |
| C _J | Junction Capacitance | f = 1 MHz, V _R = 0 V V _R = 200 V V _R = 1200 V | 450 85 65 | | pF |
| R _{THJC} | Thermal Resistance | | 5 | | °C/W |
| T _L | Lead Soldering Temperature | 1.6 mm (0.063 in) from case for 10 s | 300 | | °C |
| Isolation | Pin to Substrate Pin to Pin | | >2000 >1700 | | V _{RMS} |
| Weight | | | 2 | | g |

Fig. 1 Forward Voltage vs. Current

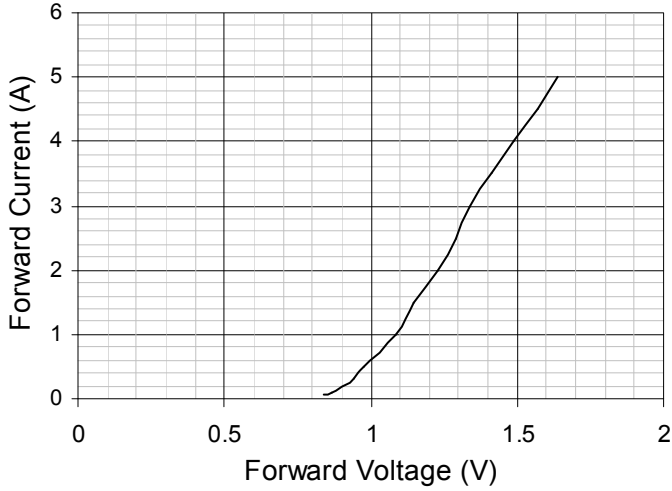


Fig. 2 Capacitance vs. Reverse Voltage

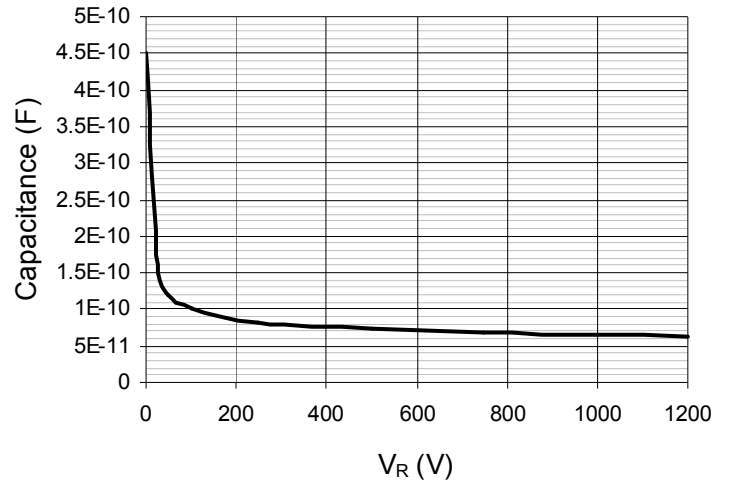


Fig. 3 Leakage Current vs. Reverse Voltage

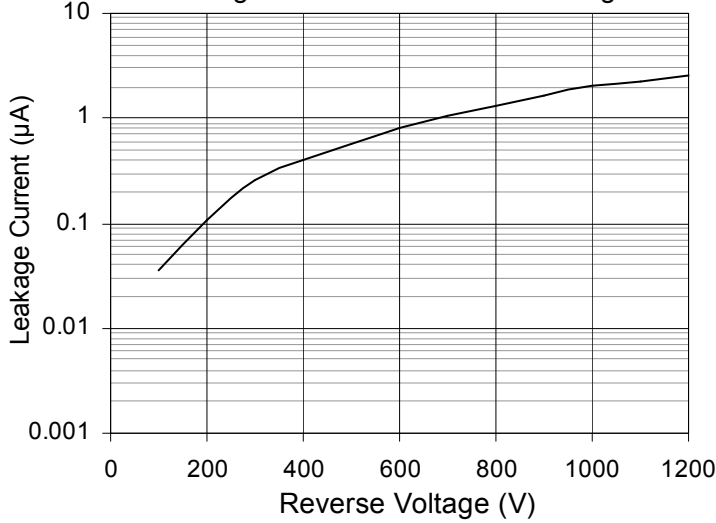


Fig. 4 Forward Voltage vs. Temperature

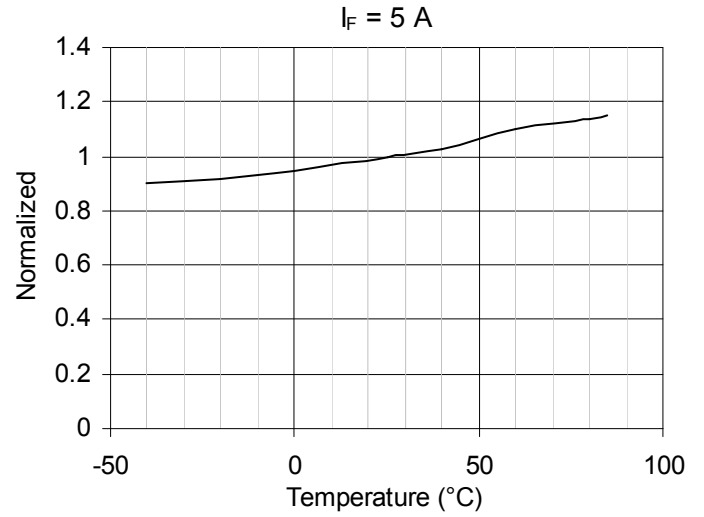


Fig. 5 Leakage Current vs. Temperature

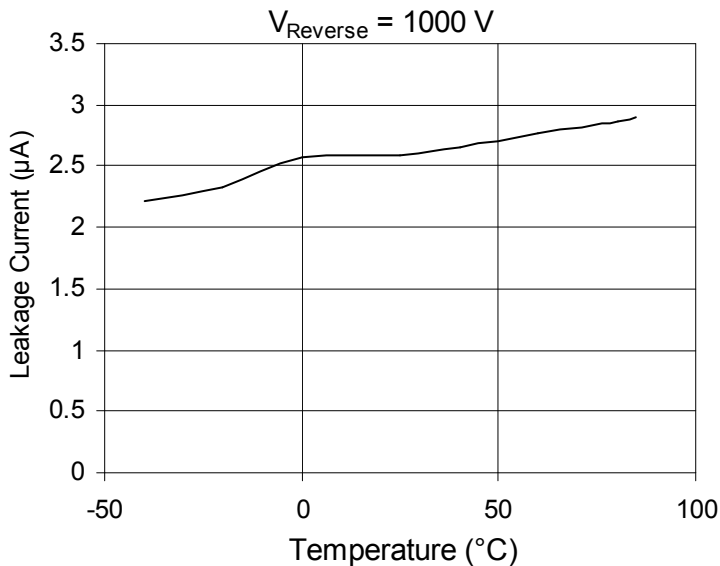
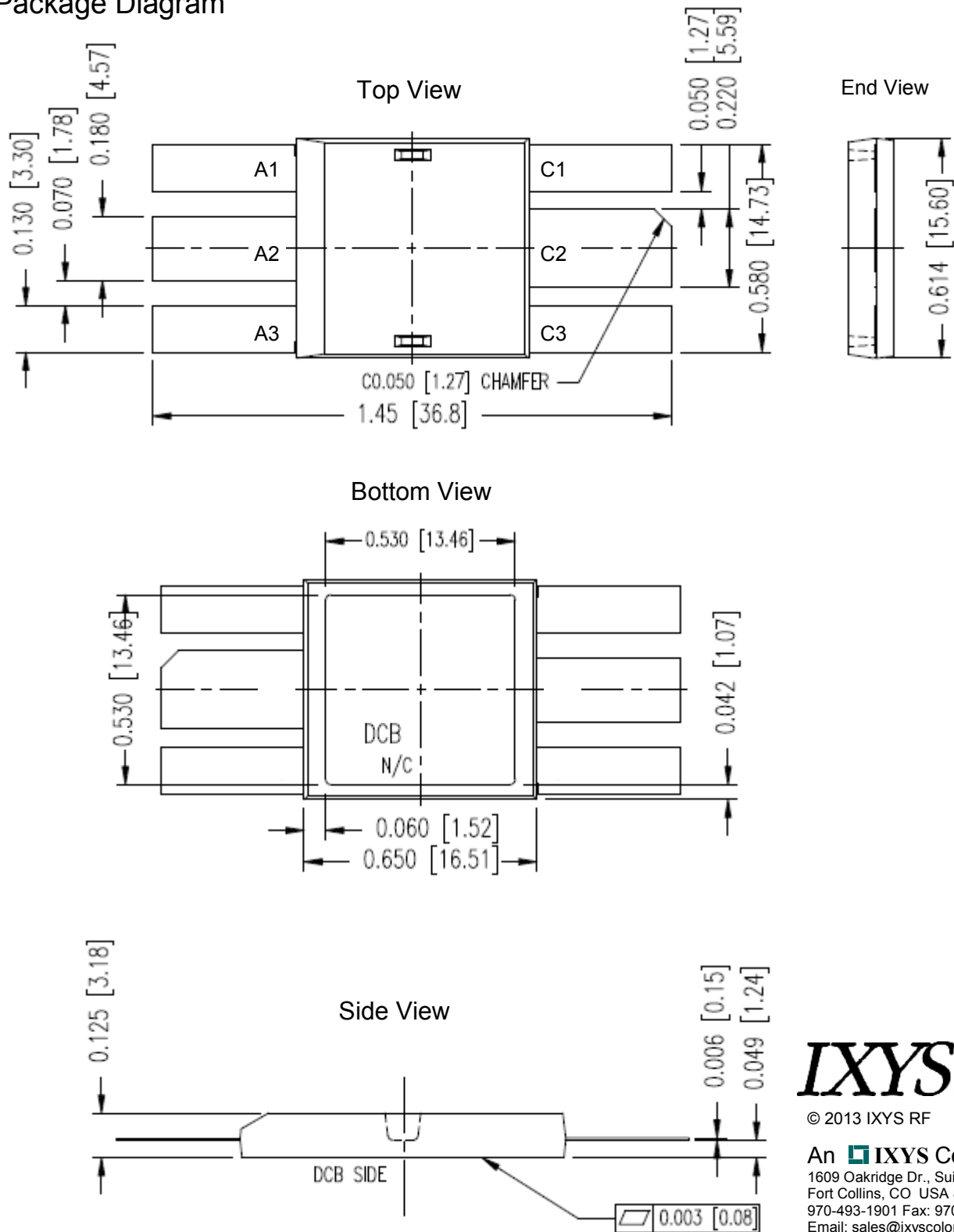


Fig. 6 Package Diagram



DCB – Direct Copper Bond under Nickel plate on an Aluminum Nitride substrate, electrically isolated from any pin.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [IXYS](#) manufacturer:

Other Similar products are found below :

[CUS06\(Te85L,Q,M\)](#) [MA4E2039](#) [D1FH3-5063](#) [MBR0530L-TP](#) [MBR10100CT-BP](#) [MBR30H100MFST1G](#) [MMBD301M3T5G](#) [PMAD1103-LF](#) [PMAD1108-LF](#) [RB160M-50TR](#) [RB520S-30](#) [RB551V-30](#) [DD350N18K](#) [DZ435N40K](#) [DZ600N16K](#) [BAS16E6433HTMA1](#) [BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [IDL02G65C5XUMA1](#) [NSR05F40QNXT5G](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#) [SBAT54CWT1G](#) [SK32A-LTP](#) [SK33A-TP](#) [SK34A-TP](#) [SK34B-TP](#) [SMD1200PL-TP](#) [ACDBN160-HF](#) [SS3003CH-TL-E](#) [STPS30S45CW](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(Te85L,QM\)](#) [MA4E2501L-1290](#) [MBR1240MFST1G](#) [MBRB30H30CT-1G](#) [BAS28E6433HTMA1](#) [BAS 70-02L E6327](#) [HSB123JTR-E](#) [JANTX1N5712-1](#) [VS-STPS40L45CW-N3](#) [DD350N12K](#) [SB007-03C-TB-E](#) [SK110-LTP](#) [SK154-TP](#) [SK32A-TP](#) [SK33B-TP](#) [SK35A-TP](#)