

Silicon Carbide Schottky Diode 2amp 10kv

QSDHCS002X1000

Features

- 10k V Schottky Rectifier
- Zero Reverse Recovery Current
- High-Frequency Operation
- Temperature-Independent Switching Behavior
- Extremely Fast Switching

Benefits

- Replace Bipolar with Unipolar Rectifiers
- Essentially No Switching Losses
- Higher Efficiency
- Reduction of Heat Sink Requirements
- Parallel Devices Without Thermal Runaway

Applications

- Switch Mode Power Supplies (SMPS)
- Power Factor Correction
- Motor Drives

Package

TBA



Part Number	Anode	Cathode
QSD-HCS02X1000	Ni/Al	Ni

Electrical Characteristics (T_J=25°C)

Symbol	Parameter	Value			Unit	Test Conditions	Note
		Min.	Typ.	Max.			
V _F	Forward Voltage		1.5		V	IF=2A, T _J =25°C	Fig. 1
						IF=2A, T _J =175°C	
I _R	Reverse Current		18		μA	VR=10k V, T _J =25°C	Fig. 2
						VR=10k V, T _J =175°C	

Typical Performance

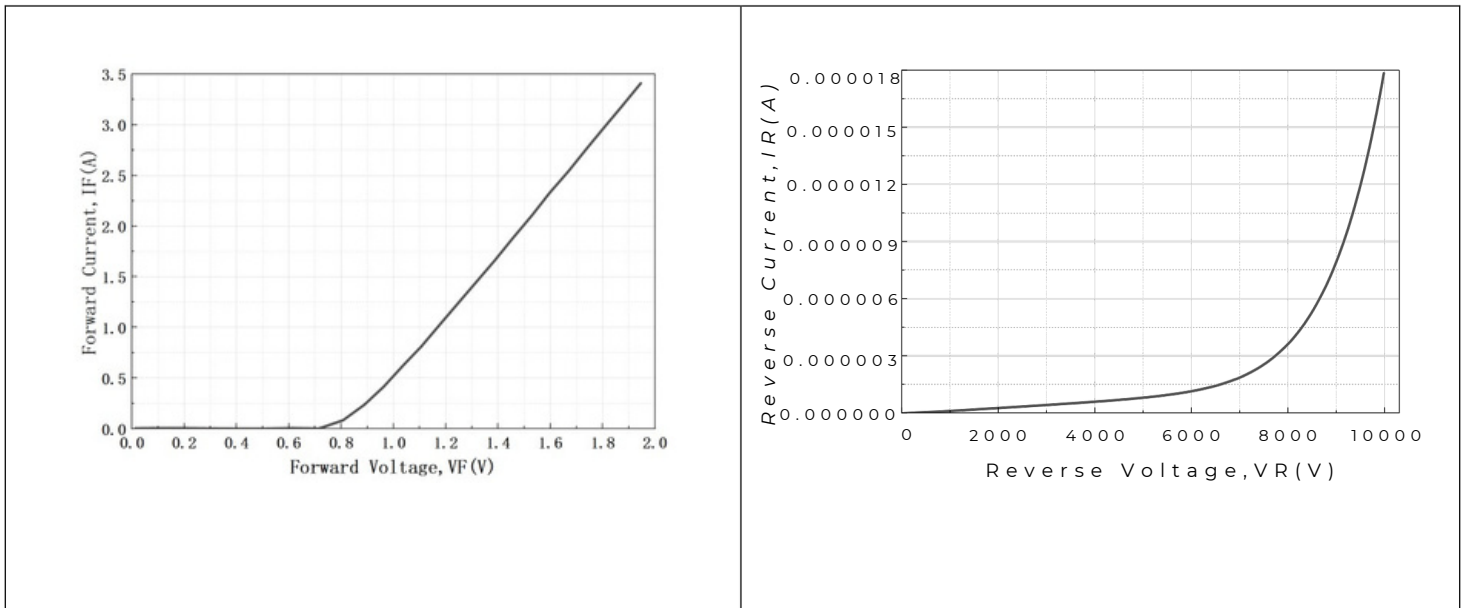
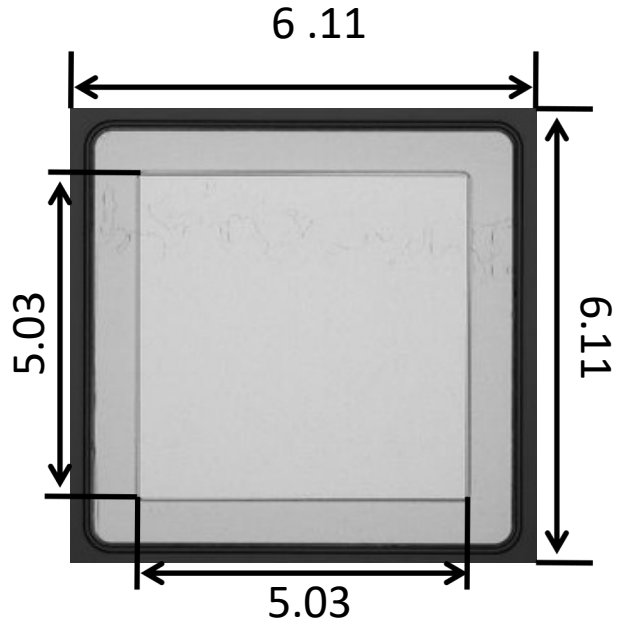


Figure 1. Forward Characteristics

Figure 2. Reverse Characteristics



Product Dimensions QSD-HCS02X1000

Parameter	Typical	Units
Die Size (Lx W) Anode Pad	6.11 x 6.11	mm
Opening Die Thickness1 Topside	5.03 x 5.03	mm
Anode Metalization (Ni/Al)	430 ± 10%	µm
Backside Cathode Metalization	4	µm
(Ni)	0.8	µm
Frontside Passivation	SiO2 Polyimide	

Revisionhistory

Document version	Date of release	Description of changes
V 1.0	2026-01-15	



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