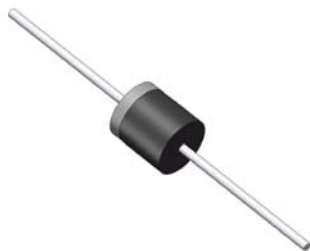


Schottky Diodes



Features

- High frequency operation
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7s, per JESD 22-B106

Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection

Mechanical Data

- **Package:** R-6
Molding compound meets UL 94 V-0 flammability rating, -
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SR2045
Device Marking Code			SR2045
Repetitive Peak Reverse Voltage	V _{RRM}	V	45
Average Rectified Output Current @60Hz sine wave, R-load, T _a =25°C	I _O	A	20
Surge(Non-repetitive)Forward Current @60Hz half sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	375
Current Squared Time @1ms≤t≤8.3ms T _j =25°C	I ² t	A ² s	583
Storage Temperature	T _{stg}	°C	-55 ~+150
Junction Temperature IN DC Forward Mode-Forward Operations, without reverse bias, t ≤1 h (Fig. 1)①	T _j	°C	-55 ~+200

NOTE

- ① Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SR2045
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =20.0A	0.51
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	mA	V _{RM} =V _{RRM} T _a =25°C	0.5
	I _{RRM2}		V _{RM} =V _{RRM} T _a =100°C	50

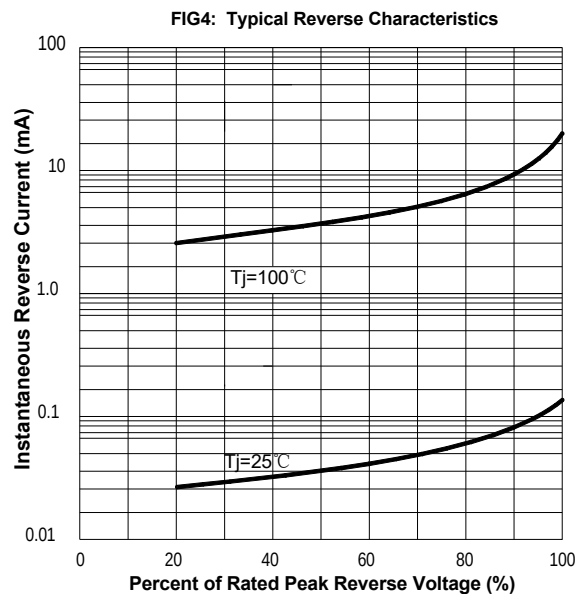
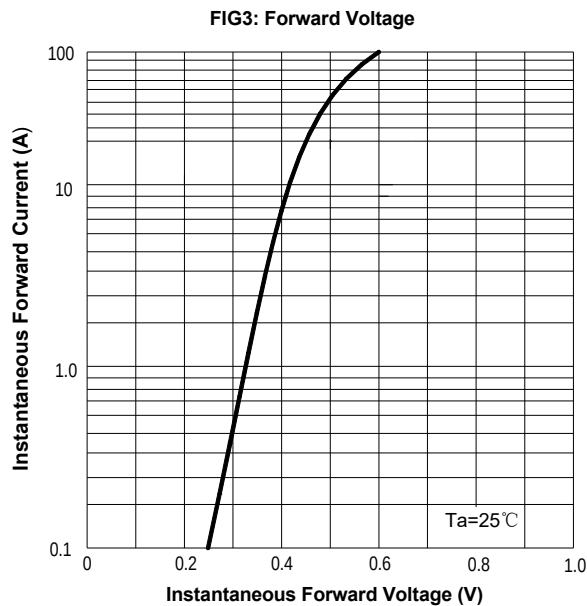
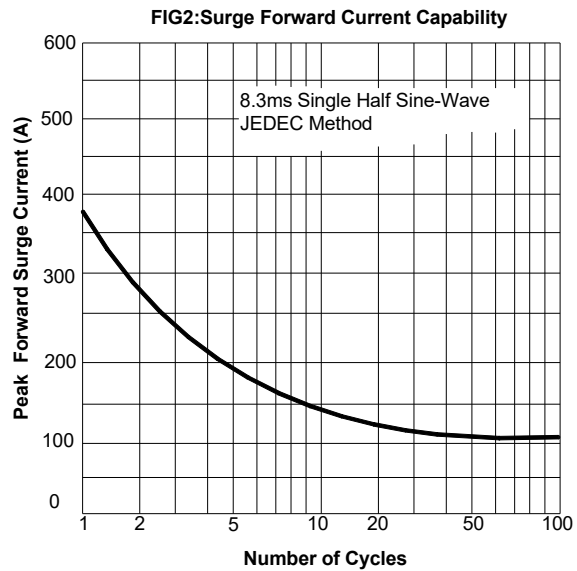
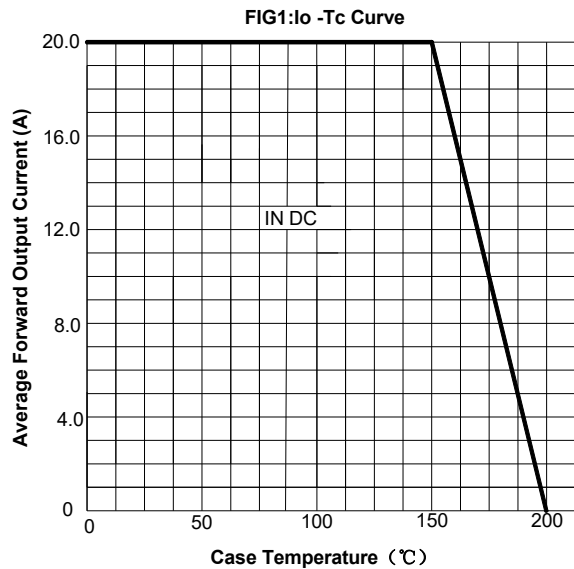
■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SR2045
Thermal Resistance	Between junction and case	RθJ-C	°C/W	2.5

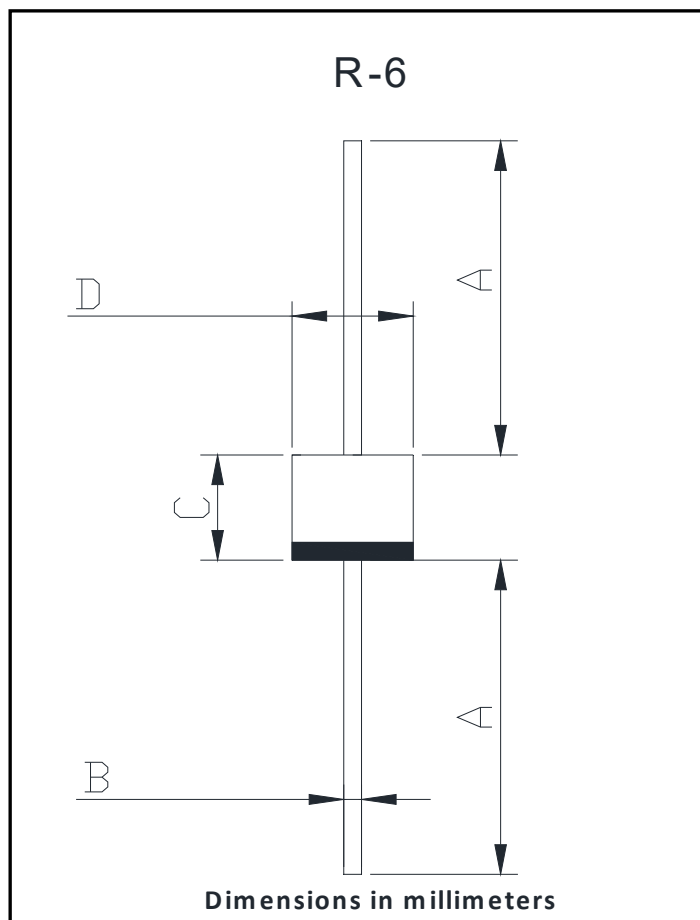
■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SR2045	Approximate 1.96	500	10	5000	Tape
SR2045	Approximate 1.96	1000	4	4000	Reel

■Characteristics (Typical)



■ Outline Dimensions



R-6		
Dim	Min	Max
A	25.4	/
B	1.2	1.3
C	8.6	9.1
D	8.6	9.1

Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.