

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, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

■Maximum Ratings (T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	25SQ045
Device Marking Code			25SQ045
Repetitive Peak Reverse Voltage	V _{RRM}	V	45
Average Rectified Output Current @60Hz sine wave, R-load, T _a =25	I _O	A	25
Surge(Non-repetitive)Forward Current @60Hz half sine wave, 1 cycle, T _a =25	I _{FSM}	A	380
Current Squared Time @1ms≤t≤8.3ms T _j =25	I ² t	A ² s	599
Storage Temperature	T _{stg}		-55 ~+150
Junction Temperature IN DC Forward Mode-Forward Operations without reverse bias, t ≤1 h (Fig. 1)	T _j		-55 ~+200

NOTE

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

■Electrical Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	25SQ045
Reverse Leakage Current V _{RM} =V _{RRM} T _a =25	I _{RRM}	mA	0.5
Forward Voltage Drop I _F =25mA	V _F	V	0.5
Reverse Recovery Time I _F =25mA, I _R =-1mA	t _{rr}	ns	50

■Thermal Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	25SQ045
Thermal Resistance Between junction and case	R _{θJ-C}	°C/W	2.5

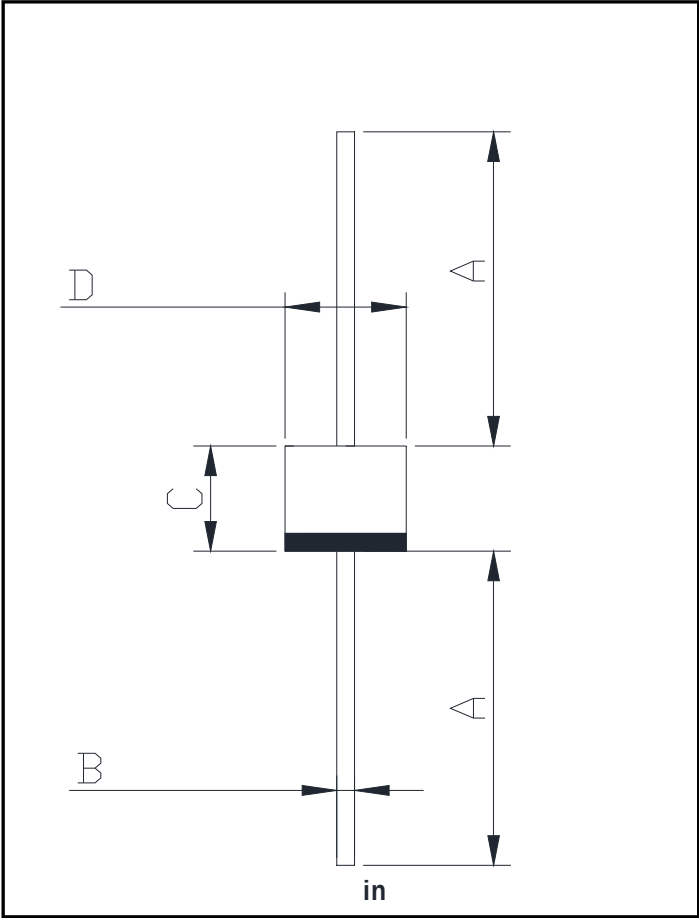


■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX
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■Outline Dimensions



Min	Max	



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