

CREATEK Microelectronics

Schottky Barrier Diode in SOD-882

Features

- Low Forward Voltage Drop
- Extremely Fast Switching Speed
- Low Reverse Recovery Time
- Surface Mount Pack age Ideally Suited for Automatic Insertion Protection

1 0 10 2 ANODE

Mechanical Data

- Case: SOD-882(plastic package).
 Lead free; RoHS compliant; Halogen free
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

Applications

- Low current rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Limit	Unit
DC reverse voltage	V _R	20	V
Mean rectifying current	Io	100	mA
Non-repetitive Peak forward surge current @ t=8.3ms	I _{FSM}	0.5	А
Power dissipation	P _D	200	mW
Junction temperature	Tj	125	°C
Storage temperature	T _{stg}	-55~+150	°C

Electrical Characteristics

 $(T_A = 25 \, ^{\circ}C \text{ unless otherwise specified})$

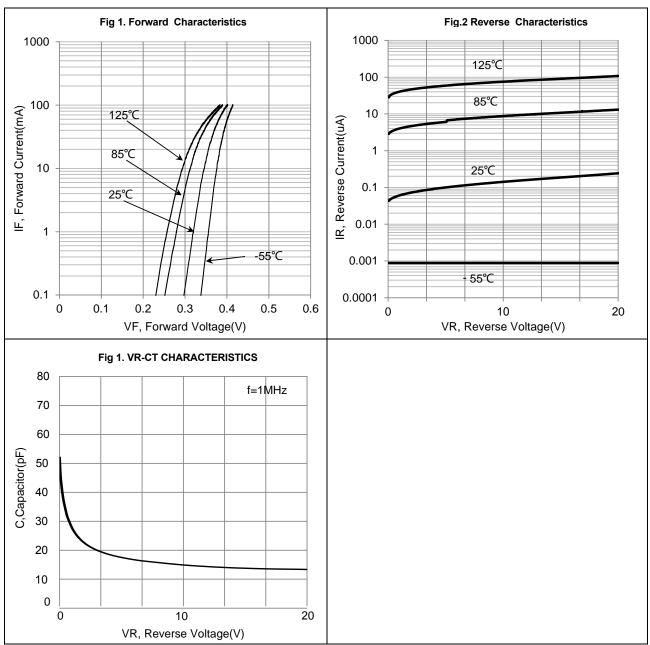
Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Breakdown Voltage	V _{BR}	I _T =10μΑ	20			V
Diode Capacitance	C _j	V _R = 1.0V, f = 1MHz		53		pF
Reverse Leakage Current	I _R	V _R =20V,T=25℃			30	uA
Forward Voltage	V _F	IF = 10 mA IF = 20 mA IF = 100 mA IF = 200 mA			0.35 0.38 0.40 0.50	V
Reverse Recovery Time	trr	IF = 10 mA. Ir=0.1IR,RL=100Ω			5	ns

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Typical Characteristics (T_{amb} = 25 °C unless otherwise specified)



0.65

1.05

0.55

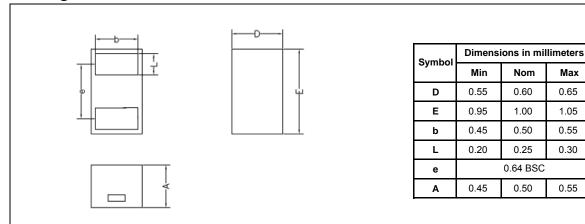
0.30

0.55

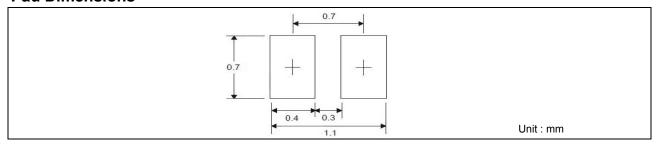


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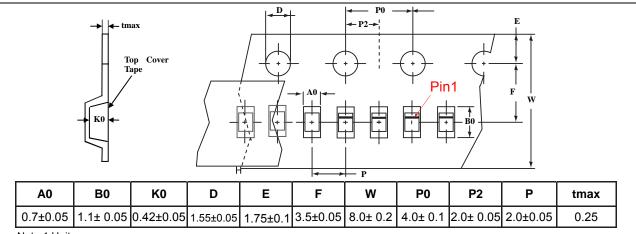
Package Dimensions



Pad Dimensions



Package Informations



Note:1.Unit: mm

2. A0, B0, and K0 are determined by component size. The clearance between the components and the cavity must be within 0.05mm min to 0.50 mm max. The component cannot rotate more than 10° within the determined cavity.

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
CSB8D2005	S20	SOD-882	Tape and reel	10000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
12-Feb2016	1.0	Initial release

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