

TECHNICAL DATA  
DATA SHEET 885, REV. B

## SILICON SCHOTTKY RECTIFIER DIE

### Very Low Forward Voltage Drop

#### Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

#### Features:

- Soft Reverse Recovery at Low and High Temperature
- Very Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics
- Electrically / Mechanically Stable during and after Packaging

#### Maximum Ratings<sup>(1)</sup>:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	150	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	15	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, half Sine wave	280	A
Max. Junction Temperature	$T_J$	-	-65 to +200	°C
Max. Storage Temperature	$T_{stg}$	-	-65 to +200	°C

#### Electrical Characteristics<sup>(1)</sup>:

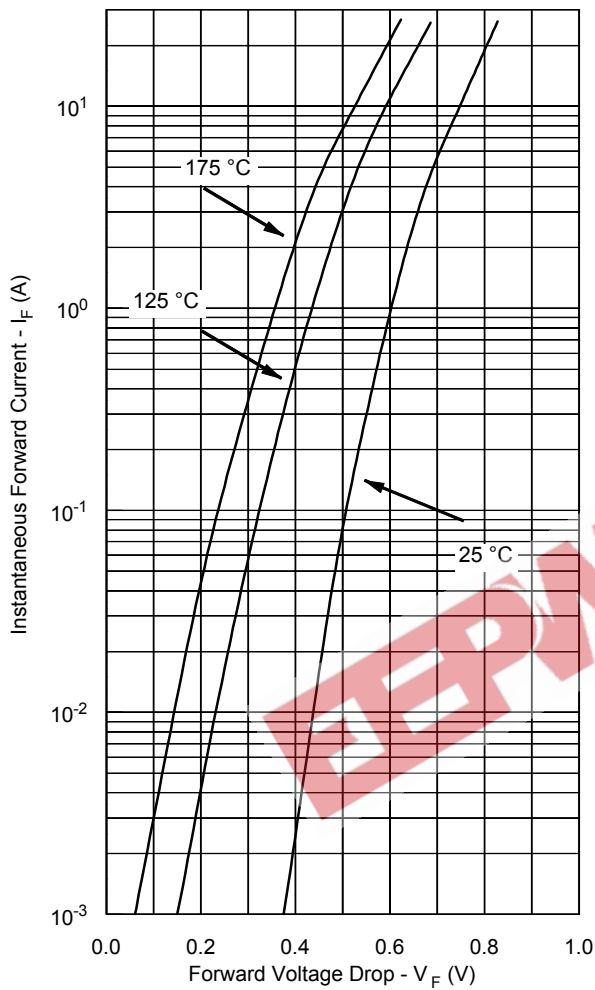
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 15A, Pulse, $T_J = 25\text{ °C}$	0.84	V
	$V_{F2}$	@ 15A, Pulse, $T_J = 125\text{ °C}$	0.68	V
Max. Reverse Current	$I_{R1}$	@ $V_R = 150V$ , Pulse, $T_J = 25\text{ °C}$	500	$\mu A$
	$I_{R2}$	@ $V_R = 150V$ , Pulse, $T_J = 125\text{ °C}$	8	mA
Max. Junction Capacitance	$C_T$	@ $V_R = 5V$ , $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$ , $V_{SIG} = 50mV$ (p-p)	500	pF

(1) in SHD package

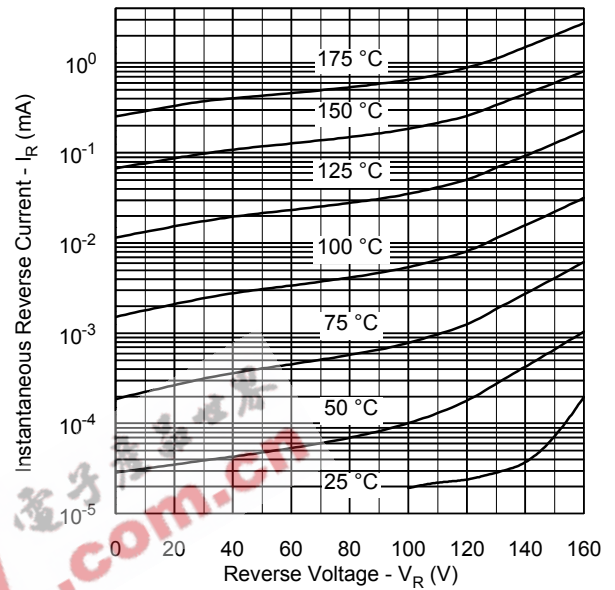
SENSITRON

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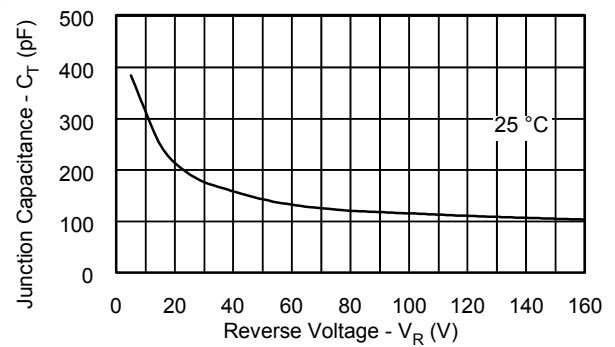
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



## SENSITRON

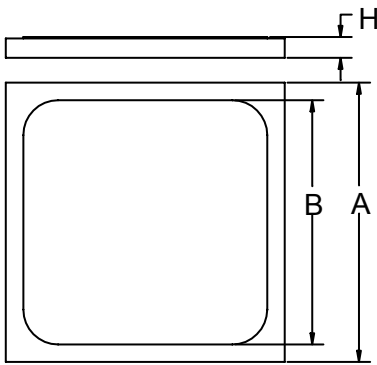
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**Mechanical Dimensions: In Inches / mm**


Figure 1

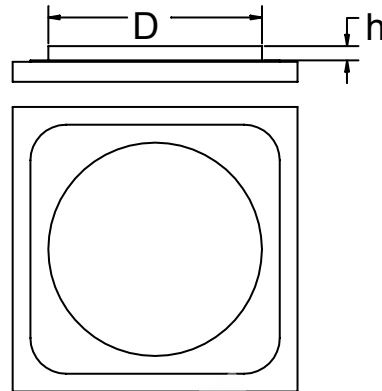


Figure 2

A	B	D	H	h
0.125±0.003	0.116±0.003	0.070±0.005	0.0155±0.001	0.010±0.002

**Top side (Anode) metallization:**

A = Al - 25 kÅ minimum, Figure 1

B = Ag - 30 kÅ minimum, Figure 1

C = Au - 12 kÅ min, Figure 2

**Bottom side (Cathode) metallization:**

A, B, C = Ti/Ni/Ag - 30 kÅ minimum.

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