

## SILICON SCHOTTKY RECTIFIER DIE

### Applications:

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

### Features:

- Ultra low Reverse Leakage Current
- 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

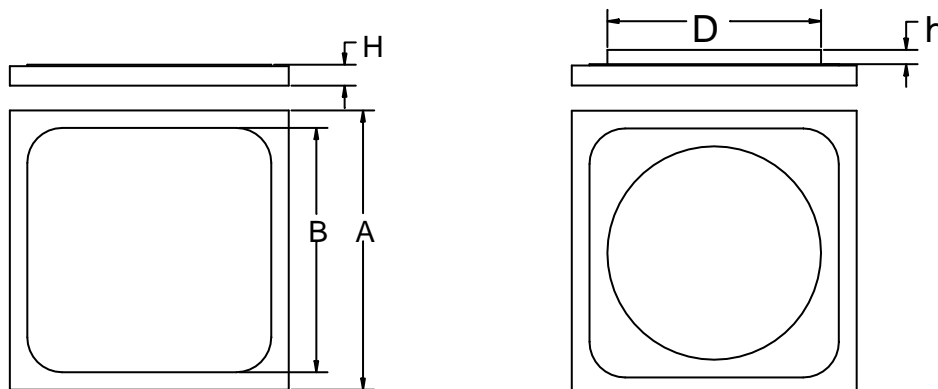
### Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	-	60	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	30	A
Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, Sine pulse <sup>(1)</sup>	570	A
Junction Temperature	$T_J$	-	-55 to +150	°C
Storage Temperature	$T_{stg}$	-	-55 to +150	°C

### Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	$V_{F1}$	@ 30A, Pulse, $T_J = 25\text{ °C}$	0.68	V
	$V_{F2}$	@ 30A, Pulse, $T_J = 125\text{ °C}$	0.62	V
Reverse Current	$I_{R1}$	@ $V_R = 60V$ , Pulse, $T_J = 25\text{ °C}$	0.8	mA
	$I_{R2}$	@ $V_R = 60V$ , Pulse, $T_J = 125\text{ °C}$	60	mA
Junction Capacitance	$C_T$	@ $V_R = 5V$ , $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$ , $V_{SIG} = 50mV$ (p-p)	1600	pF

<sup>(1)</sup> in SHD package

**TECHNICAL DATA**  
**DATASHEET 759 REV. A****Mechanical Dimensions: In Inches (mm)**

Bottom side metalization Ag - 5 kÅ minimum.

Top side metalization

A = Al - 25 kÅ minimum

B = Ag -30 kÅ minimum

C= Au plated Ni-Moly disc with bare edge

Bottom side is cathode, top side is anode.

A	B	D	H	h
$0.175 \pm 0.003$ ( $4.45 \pm 0.077$ )	$0.163 \pm 0.003$ ( $4.14 \pm 0.077$ )	$0.120 \pm 0.003$	$0.0105 \pm 0.001$ , for Al top $0.0155 \pm 0.001$ , for Ag top	$.011 \pm 0.001$

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