

TECHNICAL DATA DATA SHEET D0050, Rev. -

SILICON ULTRA FAST 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 Reverse Voltage	V _{RM}	-	200	V
Average Forward Current	I _{F(AV)}	50% duty cycle @T _C = 100°C, rectangular wave form	90	А
Peak One Cycle Non-	I _{FSM}	8.3 ms, Sine pulse	750	Α
Repetitive Surge Current				
Junction Temperature	TJ	-	150	°C
Storage Temperature	T _{stg}	-	-65 to +150	°C

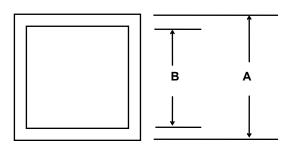
Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	V_{F1}	@ 90A, Pulse, T _J = 25°C	1.0	٧
Reverse Current	I _{R1}	@V _R = 200V, Pulse, T _J = 25 °C	60	μA
Reverse Recovery Time	Trr	I _F =0.5A; I _R =1.0A; I _{RR} =0.25A	70	ns



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Mechanical Dimensions: In Inches (mm)



Bottom side: Ni - 1000 nm ± 10% Ag - 200nm ± 10%

Top side: Al - 5µm ± 10%

Bottom side is cathode, top side is anode

Dimension H = $0.009 \pm 0.001(0.23 \pm 0.026)$ (It can be customized according to customer requirements)



Α	В	
$0.273 \pm 0.002 (6.93 \pm 0.05)$	0.264± 0.002(6.71±0.05)	

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