

TECHNICAL DATA
DATASHEET 4217, REV-

SILICON ULTRA-FAST RECOVERY EPITAXIAL RECTIFIER DIE

Applications:

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

Features:

- Glasspassivated Epitaxial Diode with Mesa Structure
- Soft Reverse Recovery at Low and High Temperature
- Low Forward Voltage Drop and Low Reverse Current
- Electrically and Mechanically Stable during and after Packaging

Maximum Ratings:

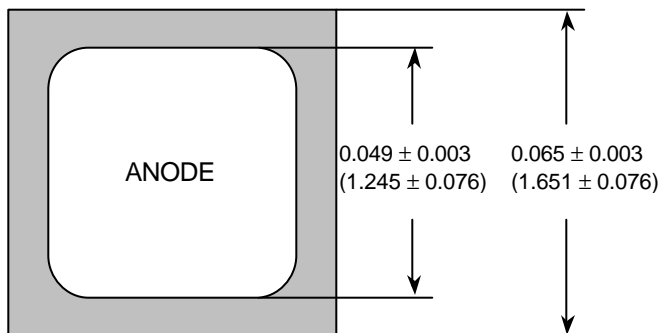
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	150	V
Max. Output Current	I_O	50% duty cycle, rectangular wave form; $T_A = 55^\circ\text{C}$	3	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, sine pulse ⁽¹⁾	125	A
Max. Junction Temperature	T_J	-	-55 to +175	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-55 to +200	$^\circ\text{C}$
Reverse Recovery Time	t_{rr}	$I_F = I_R = 1.0\text{A}$, $I_{RM} = 0.1\text{A}$	30	nS

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	4A, pulse, $T_J = 25^\circ\text{C}$	0.875	V
	V_{F2}	6A, pulse, $T_J = 25^\circ\text{C}$	0.925	V
	V_{F3}	4A, pulse, $T_J = 100^\circ\text{C}$	0.800	V
Max. Reverse Current	I_{R1}	$V_R = V_{RWM}$, pulse, $T_J = 25^\circ\text{C}$	5.0	μA
	I_{R2}	$V_R = V_{RWM}$, pulse, $T_J = 100^\circ\text{C}$	150	μA
Max. Junction Capacitance	C_T	$V_R = 10\text{V}$, $T_C = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$, $V_{SIG} = 50\text{mV (p-p)}$	60	pF

⁽¹⁾ in TO package

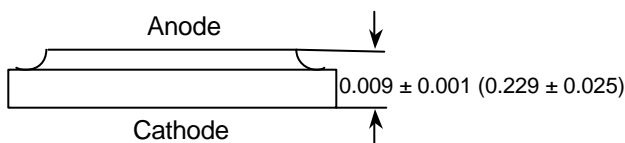
Mechanical Dimensions: In Inches (mm)



Bottom side metalization: Ti/Ni/Ag - 30 Å minimum.

Top side metalization: Al - 25 Å minimum

Bottom side is cathode, top side is anode.



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