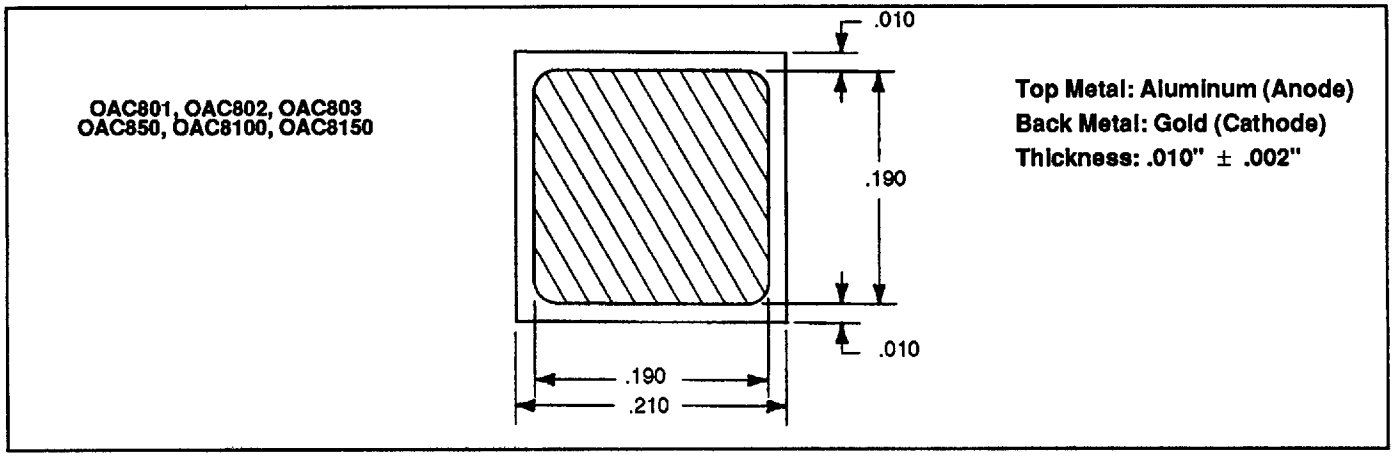
Product Bulletin OAC801
March 1990

T-03-05

High Efficiency 50A and 70A Rectifier Die
OAC801, OAC802, OAC803, OAC850, OAC8100, OAC8150



Features

- Top Metal: Alloy Aluminum (Anode)
  Back Metal: Alloy Gold (Cathode)
- Junction Sealing: Three layer passivation silicon dioxide, silicon nitride and high temperature glass for maximum reliability.
- Mesa Construction for high surge capability.
- Optek's extra fast recovery switching rectifier die exhibit the fastest t_{rr} available. This speed is coupled with low leakages and low V_F.
- Gold alloy back metal is suitable for eutectic or epoxy die attach process.
- Aluminum top metallization is ideal for a variety of wire bonding techniques.
- Also available with solderable metallization (consult factory).

Electrical Characteristics (3)

Type	Maximum Reverse Voltage V_R	Maximum Forward Voltage V_F		Maximum Reverse Current I_R		Maximum Reverse Recovery Time t_{rr}	I Surge A
		T_C = 25°C	T_C = 150°C	T_C = 25°C	T_C = 150°C		
OAC801	50V	0.975V	0.84V	25 µA	30mA	50ns(1)	800(2)
OAC802	100V	@	@	@	@		
OAC803	150V	I_F = 70A	I_F = 70A	Rated V_R	Rated V_R		
		T_C = 25°C	T_C = 100°C	T_C = 25°C	T_C = 100°C		
OAC850	50V	1.1V	0.85V	50 µA	5mA	60ns(1)	800(2)
OAC8100	100V	@	@	@	@		
OAC8150	150V	I_F = 160A	I_F = 50A	Rated V_R	Rated V_R		

(1) Measured in circuit I_F = 0.5A, I_R = IA, I_{REC} = 0.25A
(2) Non repetitive 8.35m~~S~~sec half sine wave
(3) Die are probed 100% for V_R & I_R at 25°C. All other tests are verified by wafer lot acceptance testing in DO-5 packages. Data is available upon request.

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