



OI-3000 THERMALLY CONDUCTIVE CERAMIC INSULATOR

Features and Benefit

- Very hard
- Excellent wear resistance
- · Light weight
- Wide applications
- Insulator with high break-down voltage
- High mechanical strength
- Excellent thermal stability



Product Code and Descriptions: For example:OI-3000-T0-247 OI-3000 is 3000 series TO-247 is the size :0.635mmT*17mm*22mm The OI-3000 thermally conductive ceramic insulator is mainly made of Al₂O₃, formed under calcinations in higher than 1000°C with molten rare material oxide. Al₂O₃ ceramics with high alumina content are so-called special ceramics. It usually possesses a compact structure which gives special performance to the material. The oxygen ions in Al₂O₃ ceramic material construct in a H.C.P structure, whilst aluminium ions possess 2/3 of total space within the octahedral structure. This is same as the α -Al₂O₃ structure, so it has a high melting point, very hard, and has excellent wear resistance. It is designed to be RoHS compliant and halogen-free, providing extra reassurance in applications where hazardous substances are forbidden.

Typical Application

- Thermal insulation of high
- power equipment High voltage
- MOS IC pipe
- IGBT chip
- High frequency power supply
- Mechanical equipment
- Strong current, high voltage, high temperature (<1600°C) applications

Standard Configurations

- TO -247:0.635mmT*17mm*22mm
- TO-220:1mmT*13mm*19mm
- TO-3 P:1mmT*20mm*25mm
- TO-264: 1mmT*22mm*28mm

Typical Properties

Part NO	OI-3000 Series	Test Standard
Composition	Alumina (≷96%)	
Colour	White	
Density/ g.cm ⁻¹	≥3.7	GB/T2413
Dielectric Strength/ kv/mm	≥17	GB/T 5593-2015
Flexural Strength/ Mpa	≥350	GB/T 6569-2006
Volume resistivity/ Ω.cm	≥10 ¹⁴	GB/T 5594.5-2015
Thermal expansivity/ 10 ⁻⁶ /°C	6.5-8.0	GB/T5594.3-2015
Dielectric constant/ MHz	9-10	GB/T 5594.4-2015
Surface Roughness/ Ra	≤0.75	
Thermal conductivity/ W/m-k	≥24	ISO 22007-2
Storage period/ Months	12	

SEM (North America) Inc.

SEM Belgium bv

SEM Asia Ltd.

SEM (Dongguan) Ltd.

Tel: Fax: Address: +1 585-643-2000 +1 585-427-7216 1555 Jefferson Road, Rochester, NY 14623

+32 59 560 270 Schatting 73,

8210 Zedelgem, Belgium

+852 2686 8168 +852 2686 8268 Unit 1, 3/F Block A, New Trade Plaza, 6 On Ping Street, Shatin, N.T., Hong Kong +86-769-8334 1628 +86-769-8334 2028 No. 8A Qiaoxin Road, Qiaotou, Dongguan,Guangdong, China Postal code 523525

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