

**Ultramid® A3Z3 R01**  
**PA66**

BASF

| Mechanical Properties                   | Value    | Unit  | Test Standard |
|-----------------------------------------|----------|-------|---------------|
| <b>ISO Data</b>                         |          |       |               |
| Tensile Modulus                         | 2000     | MPa   | ISO 527       |
| Yield stress                            | 55       | MPa   | ISO 527       |
| Yield strain                            | 4.5      | %     | ISO 527       |
| Nominal strain at break                 | 30       | %     | ISO 527       |
| Impact Strength (Charpy), +23°C         | no break | kJ/m² | ISO 179/1eU   |
| Impact Strength (Charpy), -30°C         | no break | kJ/m² | ISO 179/1eU   |
| Notched Impact Strength (Charpy), +23°C | 75       | kJ/m² | ISO 179/1eA   |
| Notched Impact Strength (Charpy), -30°C | 25       | kJ/m² | ISO 179/1eA   |

| Thermal Properties                        | Value | Unit | Test Standard  |
|-------------------------------------------|-------|------|----------------|
| <b>ISO Data</b>                           |       |      |                |
| Melting Temperature (10°C/min)            | 260   | °C   | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 60    | °C   | ISO 75-1/-2    |

| Electrical Properties       | Value | Unit  | Test Standard |
|-----------------------------|-------|-------|---------------|
| <b>ISO Data</b>             |       |       |               |
| Relative permittivity, 1MHz | 3.1   | -     | IEC 62631-2-1 |
| Dissipation Factor, 1MHz    | 200   | E-4   | IEC 62631-2-1 |
| Volume Resistivity          | 1E13  | Ohm*m | IEC 62631-3-1 |

| Other Properties | Value | Unit  | Test Standard  |
|------------------|-------|-------|----------------|
| <b>ISO Data</b>  |       |       |                |
| Water Absorption | 7.5   | %     | Sim. to ISO 62 |
| Density          | 1080  | kg/m³ | ISO 1183       |
| Bulk density     | 700   | kg/m³ | -              |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---------------------------------------------|-----------|------|---------------|
| Melt temperature                            | 280 - 300 | °C   | -             |
| Mold temperature                            | 70 - 80   | °C   | -             |

**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Impact modified

**Delivery form**

Pellets

**Applications**

Automotive