

Ultra low losses

Passivation: Silicon Oxide

$V_{RRM} = 400V$

$I_F = 150A$

Die Size: 6,8 x 6,8mm

Maximum rated values:

| Parameter | Symbol | min | max | Unit |
|----------------------------------------------------------------|----------------|-----|------------|------|
| Repetitive peak reverse voltage | V_{RRM} | - | 400 | V |
| Working Peak Reverse Voltage | V_{RWM} | - | 400 | V |
| DC Blocking Voltage | V_R | - | 400 | V |
| Continuous forward current | I_F | - | 150 | A |
| Repetitive peak forward current* (Square Wave, 20 kHz) | I_{FRM} | - | 300 | A |
| Nonrepetitive Peak Surge Current (Halfwave, 1 Phase, 60 Hz) | I_{FSM} | - | tdb | A |
| Avalanche Energy | E_{AVL} | - | tdb | mj |
| Junction temperature | T_j | - | 150 | °C |
| Operating and Storage Temperature | T_{STG}, T_J | | -65 to 150 | °C |

*- Limited by T_{vj} max

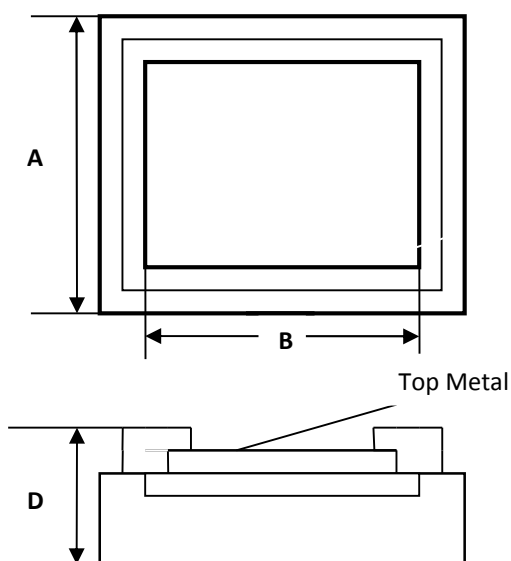
Diode Characteristics values:

| Parameter | Symbol | Conditions | min | typ | max | Unit | |
|----------------------------|----------|--------------------------------------------|-----------------------|-----|-----|------|---------|
| Continuous forward voltage | V_F | $I_F=150A, T_{vj}=25^{\circ}C$ | - | 1.1 | 1.3 | V | |
| Continuous forward voltage | V_F | $I_F=150A, T_{vj}=150^{\circ}C$ | - | 1.0 | 1.2 | V | |
| Continuous forward voltage | V_F | $I_F=60A, T_{vj}=25^{\circ}C$ | - | 0,9 | 1.1 | V | |
| Continuous reverse current | I_R | $V_R=400V$ | $T_{vj}=25^{\circ}C$ | - | 10 | 50 | μA |
| | | | $T_{vj}=125^{\circ}C$ | - | 1.0 | 1.5 | mA |
| Reverse Recovery Time | t_{rr} | $I_F=1A, V_R=30V,$ $di_F/dt=200A/\mu S$ | - | 60 | 70 | nS | |

Mechanical properties:

Top metal: **Al-Ti** – for Wire Bonding

Backside metal: **Ti-Ni-Ag** – for Soldering



| DIM | ITEM | μm |
|-------------------|-----------|--------------|
| A_x A_y | Die Size | 6800 6800 |
| D | Thickness | 350 max |
| Scribe Line Width | | 60 |