

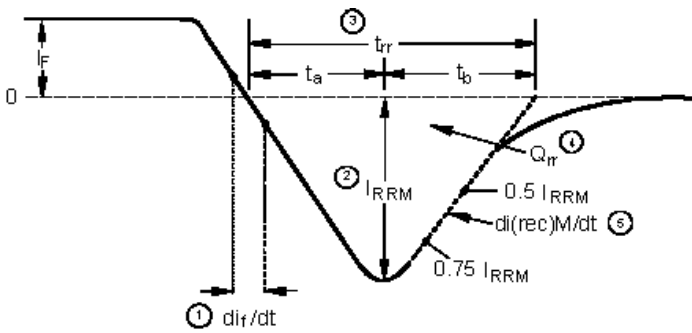


PRELIMINARY SPECIFICATION №148. **SUPERFAST DIODE KD-1060SF.**

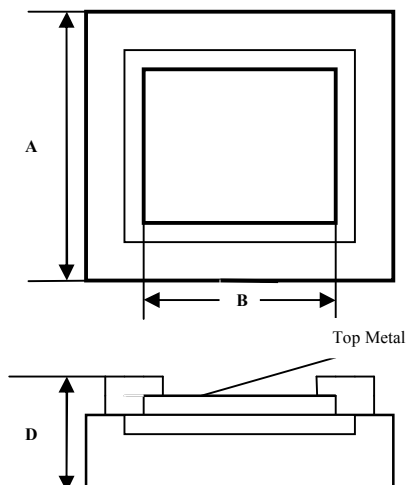
|  VSP MIKRON |  | 10A/600V. Die Size-98*98mil. | | |
|--|---|-------------------------------------|----------------|----------------|
| Electrical Characteristics | Symbol | Unit | Spec. limit | Die Sort |
| Breakdown Voltage @ $I_R=0,10\text{mA}$ | V_B | V | 600 | 620 |
| Average Rectified Forward Current | $I_{F(AV)}$ | A | 10,0 | - |
| DC Forward Voltage @ $25^\circ\text{C}, I_F=10,0\text{A}$ | V_F | V | 2,5 | 2,45 |
| Maximum Reverse Current @ $25^\circ\text{C}, V_R=600\text{V}$ @ $125^\circ\text{C}, V_R=600\text{V}$ | I_R | MA | 0,010 0,500 | 0,009 0,450 |
| Reverse Recovery Time, $I_F=1\text{A}, V_R=30\text{V}, dI_F/dt=100\text{A/uS.}$ | t_{rr} | nS | 30 | 28 |
| Operating Junction Temperature | T_J | $^\circ\text{C}$ | 175 | |



1. di_f/dt - Rate of change of current through zero crossing
2. I_{RRM} - Peak reverse recovery current
3. t_{rr} - Reverse recovery time measured from zero crossing point of negative going I_F to point where a line passing through $0.75 I_{RRM}$ and $0.50 I_{RRM}$ extrapolated to zero current
4. Q_{rr} - Area under curve defined by t_r and I_{RRM}

$$Q_{rr} = \frac{t_{rr} \times I_{RRM}}{2}$$
5. $di_{(rec)M}/dt$ - Peak rate of change of current during t_b portion of t_{rr}

| DIM | ITEM | μm |
|-------------------|----------------|---------------|
| A_x A_y | Die Size | 2500 2500 |
| B_x B_y | Top Metal Size | 1700 1700 |
| D | Thickness | 350max. |
| Scribe line Width | | 60 |



Top metal: Al – for Wire Bonding.
Backside metal: Ti-Ni-Ag – for Soldering.
www.vsp-mikron.com