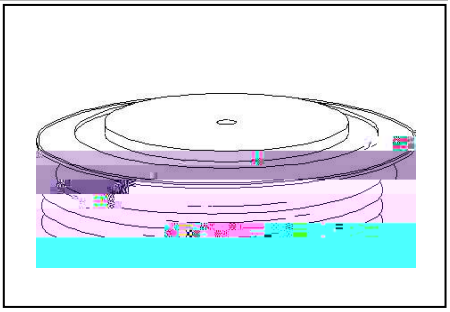
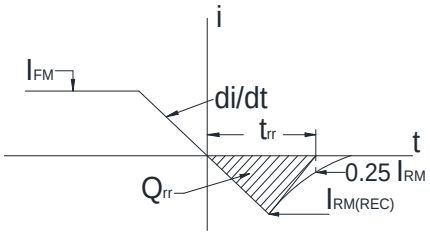


| Device Type | $V_{RRM}$ (1) | $V_{RSM}$ (1) |
|---|---|---|
| ZK720-10 | 1000 | 1100 |
| ZK720-12 | 1200 | 1300 |
| ZK720-14 | 1400 | 1500 |
| ZK720-16 | 1600 | 1700 |
| ZK720-18 | 1800 | 1900 |

$V_{RRM}$ = Repetitive peak reverse voltage
$V_{RSM}$ = Non repetitive peak reverse voltage (2)

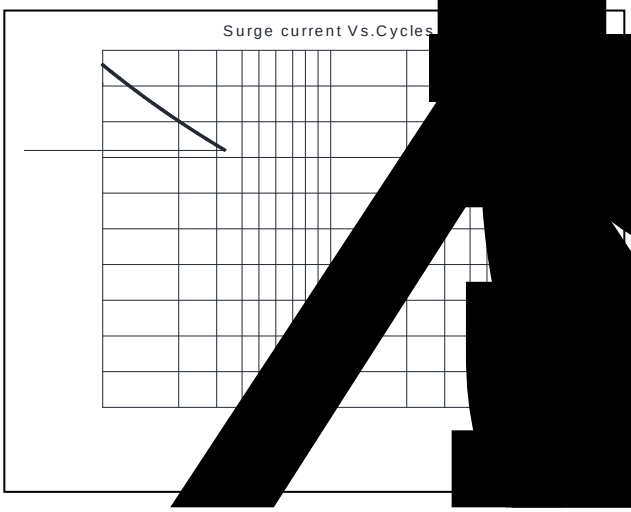
| | | |
|---|---|---|
| Repetitive peak reverse leakage current | $I_{RRM}$ | 15 mA<br>35 mA (3) |

Notes:
All ratings are specified for Tj=25 °C, unless otherwise stated
.
(1) All voltage ratings are specified for an applied 50Hz/60Hz sinusoidal waveform over the temperature range -40°C to +125 °C.
(2) 10 msec. max. pulse width
(3) Maximum value for Tj = 125 °C.
(4) See parameter definition below :



reverse recovery characteristic

| | | | | | | |
|---|---|---|---|---|---|---|
| Average forward current | $I_{F(AV)}$ | | 720 | | A | Sinewave 180°, Tc =70 |
| RMS forward current | $I_{FRMS}$ | | 1109 | | A | |
| Peak one cycle surge (non repetitive) current | $I_{FSM}$ | | 8640 | | A | 10 msec (50Hz), sinusoidal wave-shape, 180° conduction, Tj =125 |
| I square t | $I^2t$ | | 37.3 $10^4$ | | $A^2s$ | 8.3 msec and 10.0 msec |
| Peak forward voltage | $V_{FM}$ | | 2.40 | | V | $I_{FM}$= 2400A; Duty cycle 0.01% |
| Threshold voltage | $V_{FO}$ | | 1.30 | | V | Tj=125°C,I=0.5 $I_{F(AV)}$ to 1.5 $I_{F(AV)}$ |
| Slope resistance | $r_F$ | | 0.37 | | mΩ | Tj=125°C,I=0.5 $I_{F(AV)}$ to 1.5 $I_{F(AV)}$ |
| Reverse Recovery Current (4) | $I_{RM(REC)}$ | | * | | A | $I_{FM}$ = 1000 A; dIF/dt = 10 A/ s;Tjmax |
| Reverse Recovery Charge (4) | $Q_{rr}$ | | * | | µC | $I_{FM}$ = 1000 A; dIF/dt = 10 A/ s;Tjmax |
| Reverse Recovery Time (4) | $t_{rr}$ | | 5 | | µs | $I_{FM}$ = 1000 A; dIF/dt = 10 A/ s;Tjmax |


Surge current Vs.Cycles