



**THE DATASHEET OF
DF333-320-36_26MM**





TET ESTEL AS
ESTONIA

September
2015

Series
DF333-320

Fast Recovery Press-Pack
Diode
Type DF333-320

For use as high-power inverters,
fly-wheel diodes in DC choppers,
power supplies as high frequency rectifier

| | | | | | | | |
|---|------------|------|------|------|-----------|-------------------------|------|
| Maximum mean forward current | | | | | I_{FAV} | 320 A | |
| Maximum repetitive peak reverse voltage | | | | | U_{RRM} | 2400 ÷ 3600 V | |
| Reverse recovery time | | | | | t_{rr} | 3,2; 4,0; 5,0 μs | |
| U_{RRM}, V | 2400 | 2600 | 2800 | 3000 | 3200 | 3400 | 3600 |
| Voltage code | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
| $T_{vj}, °C$ | - 60 ÷ 125 | | | | | | |

MAXIMUM ALLOWABLE RATINGS

| Symbols and parameters | | Units | DF333-320 | Conditions | |
|------------------------|-------------------------------------|-------------------|------------|---|---------------------|
| I_{FAV} | Mean forward current | A | 320 605 | $T_c=90 °C$, $T_c=55 °C$, 180° half-sine wave, 50 Hz | |
| I_{FRMS} | RMS forward current | A | 502 | $T_c=90 °C$ | |
| I_{FSM} | Surge forward current | kA | 7,0 7,7 | $T_{vj}=125 °C$ $T_{vj}= 25 °C$ | tp=10 ms $U_R=0$ |
| I^2t | Limiting load integral | kA ² s | 245 296 | $T_{vj}=125 °C$ $T_{vj}= 25 °C$ | |
| U_{RRM} | Repetitive peak reverse voltage | V | 2400÷3600 | $T_j \min \leq T_{vj} \leq T_{jM}$ 180° half-sine wave, 50 Hz | |
| U_{RSM} | Non-repetitive peak reverse voltage | V | 2500÷3700 | $T_j \min \leq T_{vj} \leq T_{jM}$ 180° half-sine wave tp=10 ms, Single pulse | |
| T_{stg} | Storage temperature | °C | -60÷80 | | |
| T_{vj} | Junction temperature | °C | -60÷125 | | |

CHARACTERISTICS

| | | | | |
|-------------|---------------------------------|----|------|--|
| U_{FM} | Peak forward voltage | V | 2,7 | $T_{vj}=25 °C$, $I_{FM}=3,14 I_{FAV}$ |
| $U_{F(TO)}$ | Threshold voltage | V | 1,55 | $T_{vj}=125 °C$ $1,57 I_{FAV} < I_F < 4,71 I_{FAV}$ |
| R_T | Forward slope resistance | mΩ | 1,39 | |
| I_{RRM} | Repetitive peak reverse current | mA | 50 | $T_{vj}=125 °C$, $U_R = U_{RRM}$ |

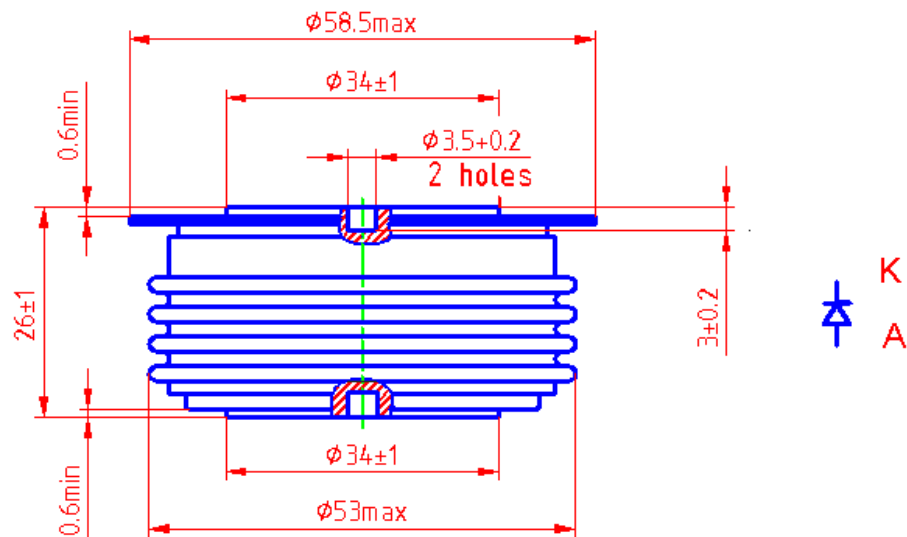
CHARACTERISTICS

| Symbols and parameters | | Units | DF333-320 | Conditions |
|------------------------|-------------------------------------|-------|-------------------------------------|--|
| trr | Reverse recovery time | μs | 3,2 ÷ 5,0 2,5 ÷ 4,0 2,0 ÷ 3,2 | Tvj=125°C, IF=320A, UR=100V diR / dt = 50A/μs diR / dt = 100A/μs diR / dt = 200A/μs |
| Qrr | Recovered charge | μC | 170 ÷ 270 220 ÷ 350 260 ÷ 410 | Tvj=125°C, IF=320A, UR=100V diR / dt = 50A/μs diR / dt = 100A/μs diR / dt = 200A/μs |
| Rthjc | Thermal resistance junction to case | °C/W | 0,04 | Direct current, double side cooled |

ORDERING

| | DF | 333 | 320 | 32 | 3 | |
|--|----|-----|-----|----|---|--|
| | 1 | 2 | 3 | 4 | 5 | |


1. Fast recovery diode.
2. Design version.
3. Mean forward current, A .
4. Voltage code (32 = 3200 V).
5. Group of reverse recovery time (1 ≤ 5,0 μs; 2 ≤ 4,0 μs; 3 ≤ 3,2 μs).



Mounting force : 10 ÷ 15 kN
Weight : 250 grams

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View DF333-320-36_26mm on WIN SOURCE](#)

 [TET Estel Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management