



TET ESTEL AS
ESTONIA

December
2014

Series
D472-400
D472-400X

Rectifier Stud-Mounted
Diodes
Type D472-400,
D472-400X

Designed for rectifiers and industrial applications

Maximum mean forward current	I_{FAV}					400 A	
Maximum repetitive peak reverse voltage	U_{RRM}					2200 ÷ 3200 V	
Reverse recovery time	trr (typ)					30 μs	
U_{RRM}, V	2200	2400	2600	2800	3000	3200	
Voltage code	22	24	26	28	30	32	
$T_{vj}, °C$	- 60 ÷ 150						

MAXIMUM ALLOWABLE RATINGS

Symbols and parameters		Units	D472-400 D472-400X	Conditions
I_{FAV}	Mean forward current	A	400 595	$T_c=100 °C$, $T_c=70 °C$, 180° half-sine wave, 50 Hz
I_{FRMS}	RMS forward current	A	628	$T_c=100 °C$
I_{FSM}	Surge forward current	kA	10 11	$T_{vj}=150 °C$ $T_{vj}= 25 °C$ tp=10 ms $U_R=0$
I^2t	Limiting load integral	kA^2s	500 605	$T_{vj}=150 °C$ $T_{vj}= 25 °C$
U_{RRM}	Repetitive peak reverse voltage	V	2200÷3200	$T_j \min \leq T_{vj} \leq T_{jM}$ 180° half-sine wave, 50 Hz
U_{RSM}	Non-repetitive peak reverse voltage	V	2300÷3300	$T_j \min \leq T_{vj} \leq T_{jM}$ 180° half-sine wave tp=10 ms, Single pulse
T_{stg}	Storage temperature	°C	-60÷80	
T_{vj}	Junction temperature	°C	-60÷150	

CHARACTERISTICS

U_{FM}	Peak forward voltage	V	1,5	$T_{vj}=25 °C$, $I_{FM}=3,14 I_{FAV}$
$U_{F(TO)}$	Threshold voltage	V	0,9	$T_{vj}=150 °C$ $1,57 I_{FAV} < I_F < 4,71 I_{FAV}$
R_T	Forward slope resistance	mΩ	0,4	
I_{RRM}	Repetitive peak reverse current	mA	50	$T_{vj}=150 °C$, $U_R = U_{RRM}$

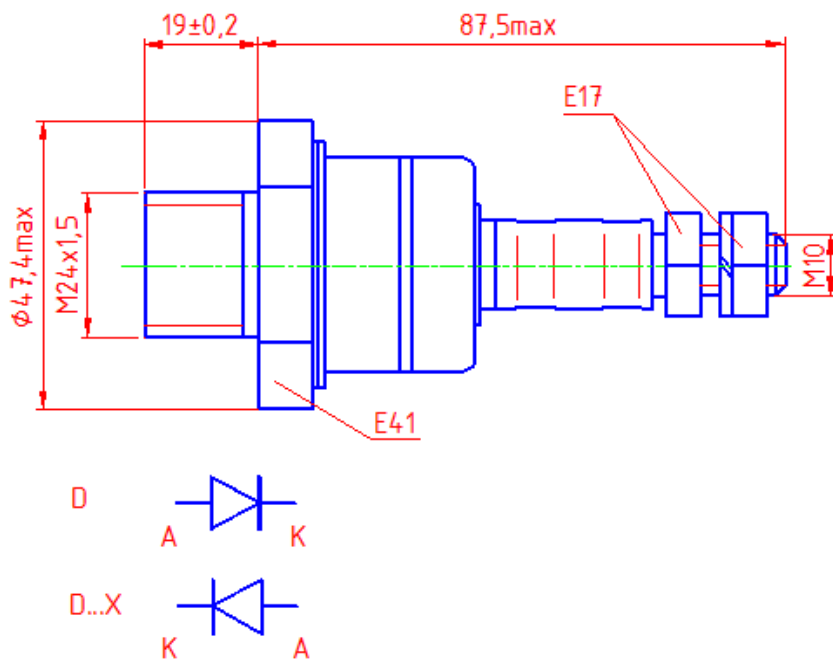
CHARACTERISTICS

Symbols and parameters		Units	D472-400 D472-400X	Conditions
Q _{rr}	Recovered charge (typ)	μC	1500	T _{vj} =150°C, I _F =400A, U _R =100V di _R / dt = 10A/μs
t _{rr}	Reverse recovery time (typ)	μS	30	
I _{rrm}	Peak reverse recovery current (typ)	A	100	
R _{thjc}	Thermal resistance junction to case	°C/W	0,09	Direct current

ORDERING

	D	472	400	X	32	
	1	2	3	4	5	

1. Diode.
2. Design version.
3. Mean forward current, A.
4. Reverse polarity (cathode stud mounted), without X-normal polarity.
5. Voltage code (32 = 3200 V).



Mounting of diodes with a rigid cathode gate should be carried through a flexible conductor.

Tightening torque: 40 ÷ 60 Nm (thread M24x1,5)

Tightening torque: 8 ÷ 12 Nm (thread M10)

Weight : 380 grams