	TET ESTEL AS ESTONIA	**December 2014**

Series
D472-500
D472-500X

Rectifier Stud-Mounted Diodes Type D472-500, D472-500X

Designed for rectifiers and industrial applications

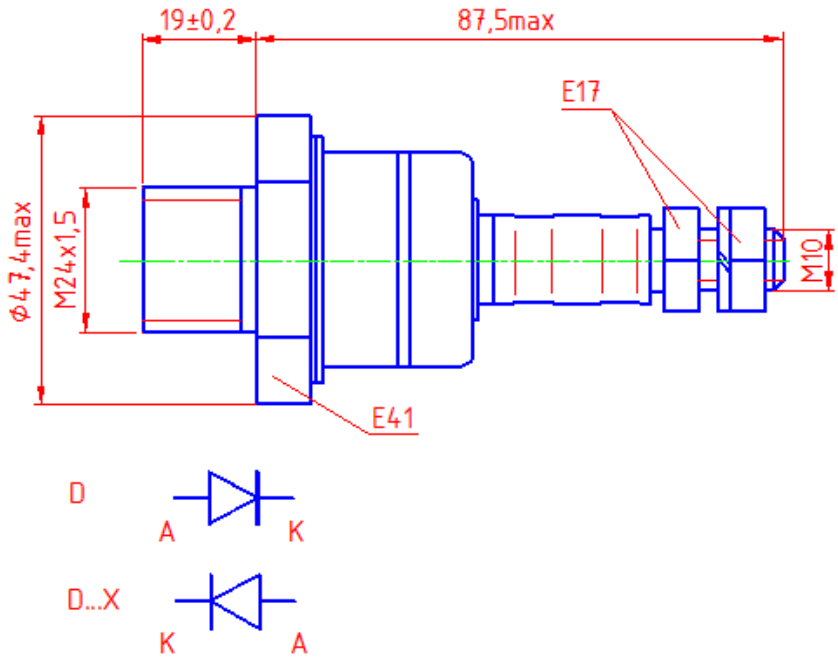
Maximum mean forward current				I_{FAV}	**500 A**	
Maximum repetitive peak reverse voltage				U_{RRM}	**2200 ÷3200 V**	
Reverse recovery time				**trr (typ)**	**30 µs**	
U_{RRM}, V	2200	2400	2600	2800	3000	3200
Voltage code	22	24	26	28	30	32
Tvj, °C	- 60 ÷ 150					

MAXIMUM ALLOWABLE RATINGS					
Symbols and parameters		Units	D472-500 D472-500X	Conditions	
I_{FAV}	Mean forward current	A	500 662	Tc=95 °C, Tc=70 °C, 180° half-sine wave, 50 Hz	
I_{FRMS}	RMS forward current	A	785	Tc=95°C	
I_{FSM}	Surge forward current	kA	11 12	Tvj=150°C Tvj= 25°C	tp=10 ms U_R=0
I^2t	Limiting load integral	kA^2s	605 720	Tvj=150°C Tvj= 25°C	
U_{RRM}	Repetitive peak reverse voltage	V	2200÷3200	Tj мin≤Tvj≤Tjм 180° half-sine wave, 50 Hz	
U_{RSM}	Non-repetitive peak reverse voltage	V	2300÷3300	Tj мin≤Tvj≤Tjм 180° half-sine wave tp=10 ms, Single pulse	
Tstg	Storage temperature	°C	-60÷80		
Tvj	Junction temperature	°C	-60÷150		
CHARACTERISTICS					
U_{FM}	Peak forward voltage	V	1,5	Tvj=25°C, I_{FM}=3,14 I_{FAV}	
$U_{F(TO)}$	Threshold voltage	V	0,8	Tvj=150°C 1,57 I_{FAV}< I_F <4,71 I_{FAV}	
R_T	Forward slope resistance	mΩ	0,33		
I_{RRM}	Repetitive peak reverse current	mA	50	Tvj=150°C, U_R= U_{RRM}	

CHARACTERISTICS				
Symbols and parameters		Units	D472-500 D472-500X	Conditions
Qrr	Recovered charge (typ)	µC	1650	Tvj=150°C, I_F=500A,U_R=100V di_R / dt = 10A/µs
trr	Reverse recovery time (typ)	µS	30	
Irr_M	Peak reverse recovery current (typ)	A	110	
Rthjc	Thermal resistance junction to case	°C/W	0,09	Direct current

ORDERING						
	D	**472**	**500**	**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
Weight : 380 grams