



TET ESTEL AS
ESTONIA

June
2013

Series
D473-2500

Rectifier Press-Pack
Diode
Type D473-2500

Designed for rectifiers and industrial applications

Maximum mean forward current					I_{FAV}	2500 A		
Maximum repetitive peak reverse voltage					U_{RRM}	3400 ÷ 4800 V		
Reverse recovery time					t_{rr} (typ)	70 μs		
U_{RRM} , V	3400	3600	3800	4000	4200	4400	4600	4800
Voltage code	34	36	38	40	42	44	46	48
T_{vj} , °C	- 60 ÷ 150							

MAXIMUM ALLOWABLE RATINGS

Symbols and parameters		Units	D473-2500	Conditions	
I_{FAV}	Mean forward current	A	2500 3970	$T_c=103^\circ\text{C}$, $T_c=55^\circ\text{C}$, 180° half-sine wave, 50 Hz	
I_{FRMS}	RMS forward current	A	3925	$T_c=103^\circ\text{C}$	
I_{FSM}	Surge forward current	kA	42 45	$T_{vj}=150^\circ\text{C}$ $T_{vj}=25^\circ\text{C}$	tp=10 ms $U_R=0$
I^2t	Limiting load integral	kA^2s	8820 10125	$T_{vj}=150^\circ\text{C}$ $T_{vj}=25^\circ\text{C}$	
U_{RRM}	Repetitive peak reverse voltage	V	3400÷4800	$T_j \min \leq T_{vj} \leq T_{jM}$ 180° half-sine wave, 50 Hz	
U_{RSM}	Non-repetitive peak reverse voltage	V	3500÷4900	$T_j \min \leq T_{vj} \leq T_{jM}$ 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	2,0	$T_{vj}=25^\circ\text{C}$, $I_{TM}=3,14 I_{TAV}$
$U_{F(TO)}$	Threshold voltage	V	0,95	$T_{vj}=150^\circ\text{C}$ $1,57 I_{TAV} < I_T < 4,71 I_{TAV}$
R_T	Forward slope resistance	m Ω	0,16	
I_{RRM}	Repetitive peak reverse current	mA	150	$T_{vj}=150^\circ\text{C}$, $U_R = U_{RRM}$

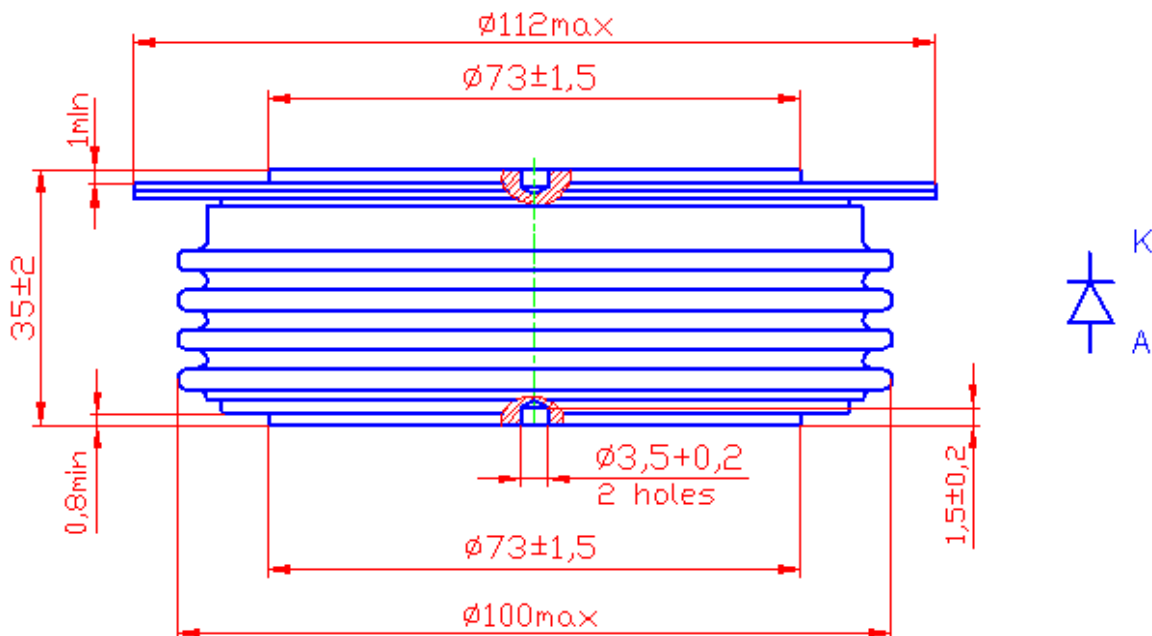
CHARACTERISTICS

Symbols and parameters		Units	D473-2500	Conditions
Q _{rr}	Recovered charge (typ)	μC	6000	T _{vj} =150°C I _F =2500 A di _R /dt =10 A/μs U _R =100V
t _{rr}	Reverse recovery time (typ)	μs	70	
I _{rrm}	Peak reverse recovery current (typ)	A	170	
R _{thjc}	Thermal resistance junction to case	°C/W	0,0095	Direct current, double side cooled

ORDERING

	D	473	2500	42	
	1	2	3	4	

1. Diode
2. Design version
3. Mean forward current, A
4. Voltage code (42=4200 V)



Mounting force : 36 ÷ 46 kN
Weight : 1700 grams