



TET ESTEL AS
ESTONIA

June
2013

Series
D273-4000

Rectifier Press-Pack
Diode
Type D273-4000

Designed for rectifiers and industrial applications

Maximum mean forward current					I_{FAV}	4000 A		
Maximum repetitive peak reverse voltage					U_{RRM}	1400 ÷ 2600 V		
Reverse recovery time					trr (typ)	40 µs		
U _{RRM} , V	1400	1500	1600	1800	2000	2200	2400	2600
Voltage code	14	15	16	18	20	22	24	26
T _{vj} , °C	- 60 ÷ 175							

MAXIMUM ALLOWABLE RATINGS

Symbols and parameters		Units	D273-4000	Conditions	
I _{FAV}	Mean forward current	A	4000 5825	T _c =105°C, T _c =55°C, 180° half-sine wave, 50 Hz	
I _{FRMS}	RMS forward current	A	6280	T _c =105 °C	
I _{FSM}	Surge forward current	kA	65 70	T _{vj} =175°C T _{vj} =25°C	tp=10 ms U _R =0
I ² t	Limiting load integral	kA ² s	21125 24500	T _{vj} =175°C T _{vj} =25°C	
U _{RRM}	Repetitive peak reverse voltage	V	1400÷2600	T _{j min} ≤T _{vj} ≤T _{jM} 180° half-sine wave, 50 Hz	
U _{RSM}	Non-repetitive peak reverse voltage	V	1500÷2700	T _{j min} ≤T _{vj} ≤T _{jM} 180° half-sine wave tp=10 ms, Single pulse	
T _{stg}	Storage temperature	°C	-60÷80		
T _{vj}	Junction temperature	°C	-60÷175		

CHARACTERISTICS

U _{FM}	Peak forward voltage	V	2,2	T _{vj} =25°C, I _{TM} =3,14 I _{TAV}
U _{F(TO)}	Threshold voltage	V	0,8	T _{vj} =175°C 1,57 I _{TAV} < I _T <4,71 I _{TAV}
R _T	Forward slope resistance	mΩ	0,085	
I _{RRM}	Repetitive peak reverse current	mA	150	T _{vj} =175°C, U _R = U _{RRM}

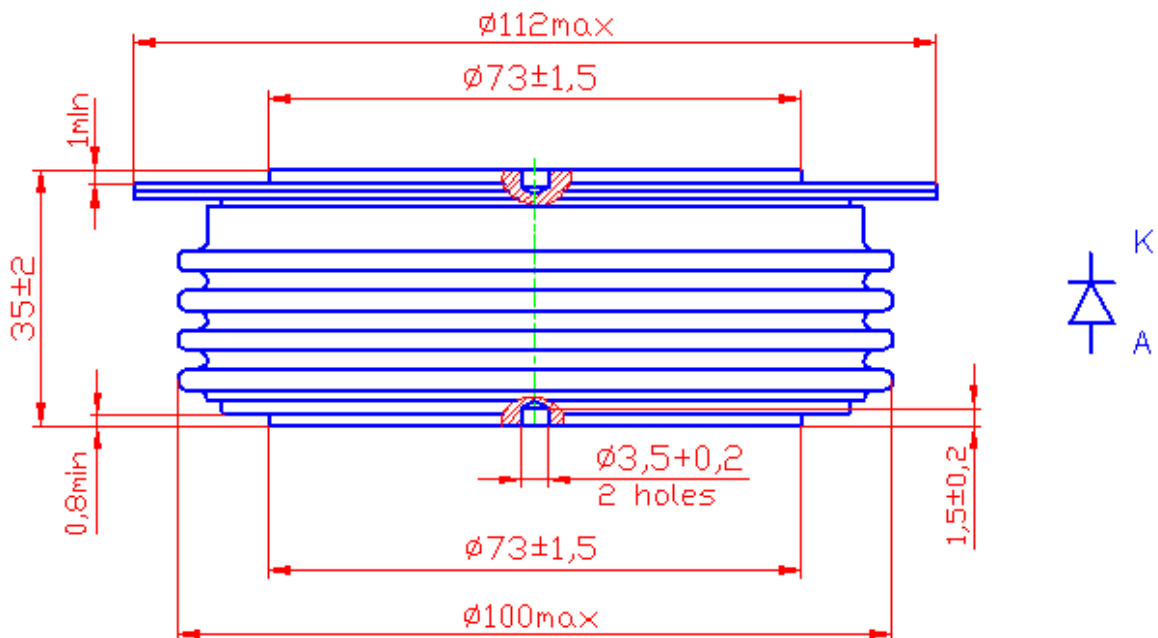
CHARACTERISTICS

Symbols and parameters		Units	D273-4000	Conditions
Q _{rr}	Recovered charge (typ)	μC	5000	T _{vj} =175°C I _F =4000 A di _R /dt =10 A/μs U _R =100V
t _{rr}	Reverse recovery time (typ)	μs	40	
I _{rrm}	Peak reverse recovery current (typ)	A	250	
R _{thjc}	Thermal resistance junction to case	°C/W	0,0095	Direct current, double side cooled

ORDERING

	D	273	4000	22	
	1	2	3	4	

1. Diode
2. Design version
3. Mean forward current, A
4. Voltage code (22=2200 V)



Mounting force : 36 ÷ 46 kN
Weight : 1700 grams