	TET ESTEL AS ESTONIA	**July 2015**

Series
D043-2000

Rectifier Press-Pack Diode Type D043-2000

Designed for rectifiers and industrial applications

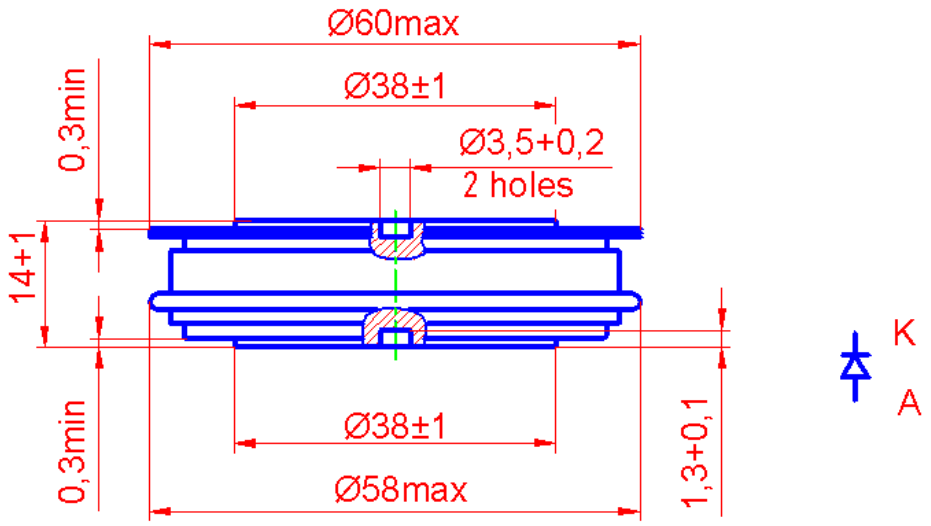
Maximum mean forward current				I_{FAV}		**2000 A**	
Maximum repetitive peak reverse voltage				U_{RRM}		**200 ÷800 V**	
Reverse recovery time				**trr** (typ)		**20 µs**	
U_{RRM}, V	200	300	400	500	600	700	800
Voltage code	2	3	4	5	6	7	8
Tvj, °C	- 60 ÷ 180						

MAXIMUM ALLOWABLE RATINGS					
Symbols and parameters		Units	D043-2000	Conditions	
I_{FAV}	Mean forward current	A	2000 2875	Tc = 104°C, Tc = 55°C, 180° half-sine wave, 50 Hz	
I_{FRMS}	RMS forward current	A	3140	Tc=104 °C	
I_{FSM}	Surge forward current	kA	24 26	Tvj=180°C Tvj=25°C	tp=10 ms U_R=0
I^2t	Limiting load integral	kA^2s	2880 3380	Tvj=180°C Tvj=25°C	
U_{RRM}	Repetitive peak reverse voltage	V	200÷800	Tj min≤Tvj≤Tjм 180° half-sine wave, 50 Hz	
U_{RSM}	Non-repetitive peak reverse voltage	V	300÷900	Tj min≤Tvj≤Tjм 180° half-sine wave tp=10 ms, Single pulse	
Tstg	Storage temperature	°C	-60÷80		
Tvj	Junction temperature	°C	-60÷180		
CHARACTERISTICS					
U_{FM}	Peak forward voltage	V	1,55	Tvj=25°C, I_{TM}=3,14 I_{TAV}	
$U_{F(TO)}$	Threshold voltage	V	0,84	Tvj=180°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	50	Tvj=180°C, U_R= U_{RRM}	

CHARACTERISTICS				
Symbols and parameters		Units	D043-2000	Conditions
Qrr	Recovered charge (typ)	µC	1000	Tvj=180°C I_F=2000 A di_R/dt =10 A/µs U_R=100V
trr	Reverse recovery time (typ)	µs	20	
Irrм	Peak reverse recovery current (typ)	A	100	
Rthjc	Thermal resistance junction to case	°C/W	0,03	Direct current, double side cooled

ORDERING					
	D	**043**	**2000**	**6**	
	1	**2**	**3**	**4**	

1. Diode
2. Design version
3. Mean forward current, A
4. Voltage code (6=600 V).



Mounting force : 13 ÷ 19 kN
Weight : 210 grams