	TET ESTEL AS ESTONIA	**July 2013**

Series
DF243-630

Fast Recovery Press-Pack Diode Type DF243-630

For use as high-power inverters,
fly-wheel diodes in DC choppers,
power supplies as high frequency rectifier

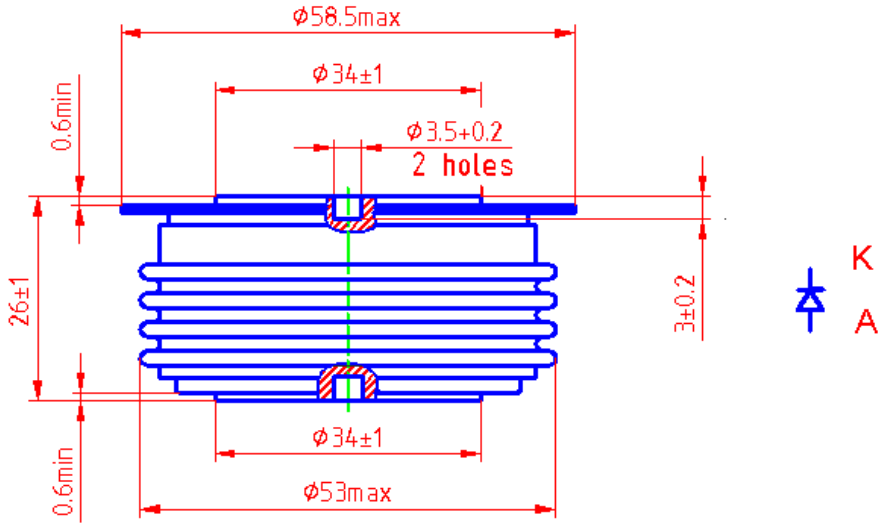
Maximum mean forward current					I_{FAV}	**630 A**		
Maximum repetitive peak reverse voltage					U_{RRM}	**1400 ÷2600 V**		
Reverse recovery time					**trr**	**2,0; 2,5; 3,2 µs**		
U_{RRM}, V	1400	1500	1600	1800	2000	2200	2400	2600
Voltage code	14	15	16	18	20	22	24	26
Tvj, °C	- 60 ÷ 125							

MAXIMUM ALLOWABLE RATINGS					
Symbols and parameters		Units	DF243-630	Conditions	
I_{FAV}	Mean forward current	A	630 870	Tc=80 °C, Tc=55 °C, 180° half-sine wave, 50 Hz	
I_{FRMS}	RMS forward current	A	989	Tc=80°C	
I_{FSM}	Surge forward current	kA	12 13,5	Tvj=125°C Tvj= 25°C	tp=10 ms U_R=0
I^2t	Limiting load integral	kA^2s	720 911	Tvj=125°C Tvj= 25°C	
U_{RRM}	Repetitive peak reverse voltage	V	1400÷2600	Tj min≤Tvj≤Tjм 180° half-sine wave, 50 Hz	
U_{RSM}	Non-repetitive peak reverse voltage	V	1500÷2700	Tj min≤Tvj≤Tjм 180° half-sine wave tp=10 ms, Single pulse	
Tstg	Storage temperature	°C	-60÷80		
Tvj	Junction temperature	°C	-60÷125		
CHARACTERISTICS					
U_{FM}	Peak forward voltage	V	2,4	Tvj=25°C, I_{FM}=3,14 I_{FAV}	
$U_{F(TO)}$	Threshold voltage	V	1,5	Tvj=125°C 1,57 I_{FAV}< I_F <4,71 I_{FAV}	
R_T	Forward slope resistance	mΩ	0,55		
I_{RRM}	Repetitive peak reverse current	mA	50	Tvj=125°C, U_R= U_{RRM}	

CHARACTERISTICS				
Symbols and parameters		Units	DF243-630	Conditions
trr	Reverse recovery time	μs	2,0 ÷ 3,2 1,6 ÷ 2,5 1,25 ÷ 2,0	Tvj=125°C, IF=630A,UR=100V diR / dt = 50A/μs diR / dt =100A/μs diR / dt =200A/μs
Qrr	Recovered charge	μC	90 ÷140 120 ÷ 190 180 ÷280	Tvj=125°C, IF=630A,UR=100V diR / dt = 50A/μs diR / dt =100A/μs diR / dt =200A/μs
Rthjc	Thermal resistance junction to case	°C/W	0,03	Direct current, double side cooled

ORDERING						
	DF	**243**	**630**	**22**	**3**	
	1	**2**	**3**	**4**	**5**	

1. Fast recovery diode
2. Design version
3. Mean forward current, A
4. Voltage code (22 = 2200 V)
5. Group of reverse recovery time (3 ≤ 3,2 μs; 4 ≤ 2,5 μs; 5 ≤ 2,0 μs)



Mounting force : 13 ÷ 19 kN
Weight : 320 grams