	TET ESTEL AS ESTONIA	**September 2015**

Series
DL253-2000

Avalanche Rectifier Press-Pack Diode
Type DL253-2000

Guaranteed maximum avalanche power dissipation.
Designed for rectifiers and industrial applications.

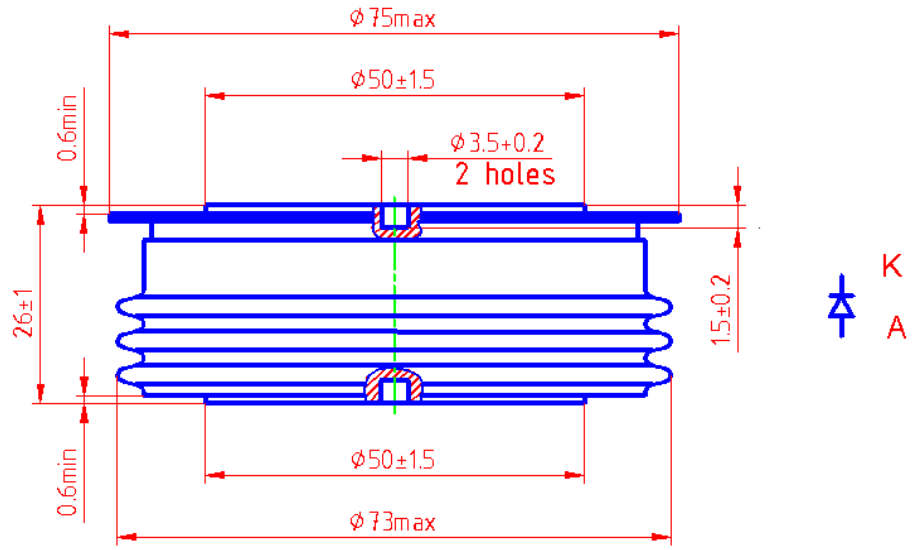
Maximum mean forward current		I_{FAV}	**2000 A**
Maximum repetitive peak reverse voltage		U_{RRM}	**1600 ÷2000 V**
Surge reverse power dissipation		P_{RSM}	**16 kW**
Reverse recovery time		**trr** (typ)	**40 µs**
U_{RRM}, V	1600	1800	2000
Voltage code	16	18	20
Tvj, °C	- 60 ÷ 150		

MAXIMUM ALLOWABLE RATINGS					
Symbols and parameters		Units	DL253-2000	Conditions	
I_{FAV}	Mean forward current	A	2000 3120	Tc=100°C, Tc=55°C, 180° half-sine wave, 50 Hz	
I_{FRMS}	RMS forward current	A	3140	Tc=100°C	
I_{FSM}	Surge forward current	kA	30 33	Tvj=150°C Tvj=25°C	tp=10 ms U_R=0
I^2t	Limiting load integral	kA^2s	4500 5445	Tvj=150°C Tvj=25°C	
U_{RRM}	Repetitive peak reverse voltage	V	1600÷2000	Tj min≤Tvj≤Tjм 180° half-sine wave, 50 Hz	
U_{BR}	Reverse breakdown voltage	V	2000÷2500	Tj min≤Tvj≤Tjм 180° half-sine wave, 50 Hz I_R=10mA	
P_{RSM}	Surge reverse power dissipation	kW	16	Tvj=150°C; tp=100 µs; 180° half-sine wave	
Tstg	Storage temperature	°C	-60÷80		
Tvj	Junction temperature	°C	-60÷150		
CHARACTERISTICS					
U_{FM}	Peak forward voltage	V	1,9	Tvj=25°C, I_{TM}=3,14 I_{TAV}	
$U_{F(TO)}$	Threshold voltage	V	0,9	Tvj=150°C 1,57 I_{TAV}< I_T <4,71 I_{TAV}	
R_T	Forward slope resistance	mΩ	0,11		

CHARACTERISTICS				
Symbols and parameters		Units	DL253-2000	Conditions
I_{RRM}	Repetitive peak reverse current	mA	40	Tvj=150°C, $U_R = U_{RRM}$
Qrr	Recovered charge (typ)	µC	4500	Tvj=150°C I_F=2000 A di_R/dt =10 A/µs U_R=100V
trr	Reverse recovery time (typ)	µs	40	
I_{RM}	Peak reverse recovery current (typ)	A	225	
Rthjc	Thermal resistance junction to case	°C/W	0,019	Direct current, double side cooled

ORDERING					
	DL	**253**	**2000**	**20**	
	1	**2**	**3**	**4**	

1. Avalanche diode.
2. Design version.
3. Mean forward current, A.
4. Voltage code (20=2000 V).



Mounting force : 19 ÷ 28 kN
Weight : 580 grams