



TET ESTEL AS
ESTONIA

January
2016

Series
D243-800

Rectifier Press-Pack
Diode
Type D243-800

Designed for rectifiers and industrial applications

Maximum mean forward current					I_{FAV}	800 A	
Maximum repetitive peak reverse voltage					U_{RRM}	1600 ÷ 2800 V	
Reverse recovery time					trr (typ)	35 µs	
U _{RRM} , V	1600	1800	2000	2200	2400	2600	2800
Voltage code	16	18	20	22	24	26	28
T _{vj} , °C	- 60 ÷ 175						

MAXIMUM ALLOWABLE RATINGS

Symbols and parameters		Units	D243-800	Conditions
I _{FAV}	Mean forward current	A	800 1790	T _c =138 °C T _c =55 °C, 180° half-sine wave, 50 Hz
I _{FRMS}	RMS forward current	A	1255	T _c =138 °C
I _{FSM}	Surge forward current	kA	16 18	T _{vj} =175°C T _{vj} =25°C
I ² _t	Limiting load integral	kA ² s	1280 1620	T _{vj} =175°C T _{vj} =25°C
U _{RRM}	Repetitive peak reverse voltage	V	1600÷2800	T _{j min} ≤T _{vj} ≤T _{jM} 180° half-sine wave, 50 Hz
U _{RSM}	Non-repetitive peak reverse voltage	V	1700÷2900	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	

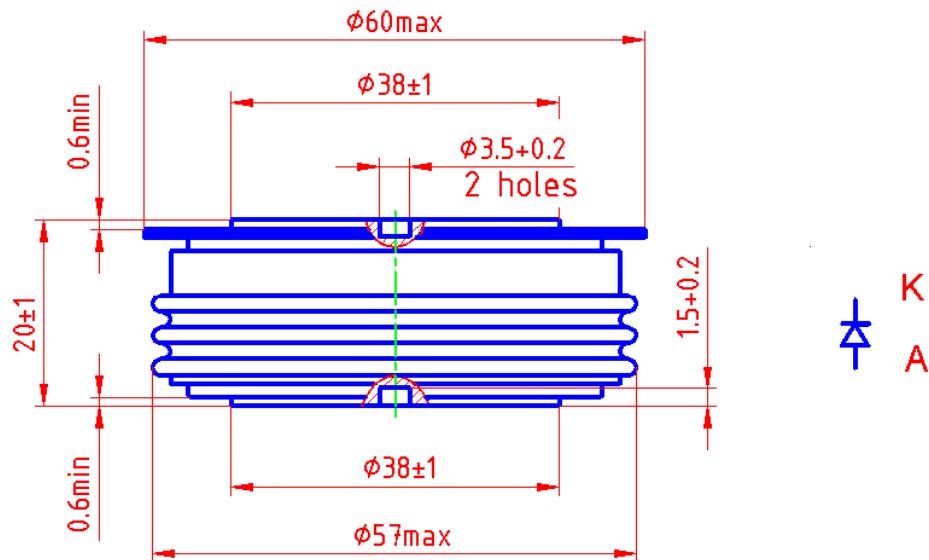
CHARACTERISTICS

U _{FM}	Peak forward voltage	V	1,6	T _{vj} =25°C, I _{TM} =3,14 I _{TAV}
U _{F(TO)}	Threshold voltage	V	0,9	T _{vj} =175°C 1,57 I _{TAV} < I _T < 4,71 I _{TAV}
R _T	Forward slope resistance	mΩ	0,3	
I _{RRM}	Repetitive peak reverse current	mA	50	T _{vj} =175°C, U _R = U _{RRM}

CHARACTERISTICS				
Symbols and parameters		Units	D243-800	Conditions
Qrr	Recovered charge (typ)	μC	2500	$T_{vj}=175^{\circ}\text{C}$ $I_F=800\text{ A}$ $di_R/dt =10\text{ A}/\mu\text{s}$ $U_R=100\text{V}$
trr	Reverse recovery time (typ)	μs	35	
Irrm	Peak reverse recovery current (typ)	A	140	
Rthjc	Thermal resistance junction to case	$^{\circ}\text{C}/\text{W}$	0,03	Direct current, double side cooled

ORDERING					
	D	243	800	24	
	1	2	3	4	

1. Diode
2. Design version
3. Mean forward current, A
4. Voltage code (24=2400 V)



Mounting force : 13 ÷ 19 kN
 Weight : 260 grams