



TET ESTEL AS
ESTONIA

December
2015

Series
D343-1000

Rectifier Press-Pack
Diode
Type D343-1000

Designed for rectifiers and industrial applications

Maximum mean forward current					I_{FAV}	1000 A
Maximum repetitive peak reverse voltage					U_{RRM}	2600 ÷ 3600 V
Reverse recovery time					t_{rr} (typ)	40 μs
U_{RRM} , V	2600	2800	3000	3200	3400	3600
Voltage code	26	28	30	32	34	36
T_{vj} , °C	- 60 ÷ 150					

MAXIMUM ALLOWABLE RATINGS

Symbols and parameters		Units	D343-1000	Conditions
I_{FAV}	Mean forward current	A	1000 1505	$T_c=100\text{ }^\circ\text{C}$, $T_c=55\text{ }^\circ\text{C}$, 180° half-sine wave, 50 Hz
I_{FRMS}	RMS forward current	A	1570	$T_c=100\text{ }^\circ\text{C}$
I_{FSM}	Surge forward current	kA	15 17	$T_{vj}=150\text{ }^\circ\text{C}$ $T_{vj}=25\text{ }^\circ\text{C}$
I^2t	Limiting load integral	kA^2s	1125 1445	$T_{vj}=150\text{ }^\circ\text{C}$ $T_{vj}=25\text{ }^\circ\text{C}$ $t_p=10\text{ ms}$ $U_R=0$
U_{RRM}	Repetitive peak reverse voltage	V	2600÷3600	$T_j \text{ min} \leq T_{vj} \leq T_{jm}$ 180° half-sine wave, 50 Hz
U_{RSM}	Non-repetitive peak reverse voltage	V	2700÷3700	$T_j \text{ min} \leq T_{vj} \leq T_{jm}$ 180° half-sine wave $t_p=10\text{ ms}$, Single pulse
T_{stg}	Storage temperature	°C	-60÷80	
T_{vj}	Junction temperature	°C	-60÷150	

CHARACTERISTICS

U_{FM}	Peak forward voltage	V	1,9	$T_{vj}=25\text{ }^\circ\text{C}$, $I_{TM}=3,14 I_{TAV}$
$U_{F(TO)}$	Threshold voltage	V	0,8	$T_{vj}=150\text{ }^\circ\text{C}$ $1,57 I_{TAV} < I_T < 4,71 I_{TAV}$
R_T	Forward slope resistance	$\text{m}\Omega$	0,35	
I_{RRM}	Repetitive peak reverse current	mA	50	$T_{vj}=150\text{ }^\circ\text{C}$, $U_R = U_{RRM}$

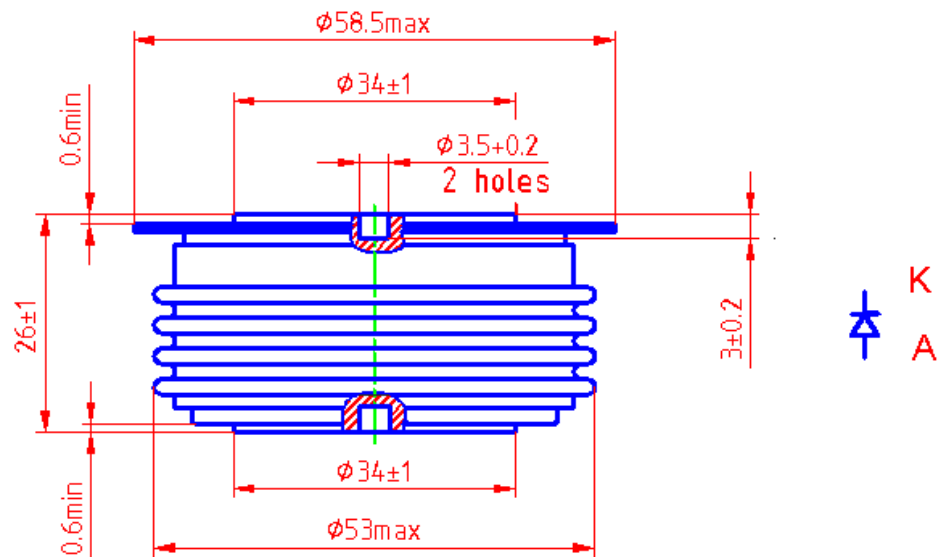
CHARACTERISTICS

Symbols and parameters		Units	D343-1000	Conditions
Q _{rr}	Recovered charge (typ)	μC	3000	T _{vj} =150°C I _F =1000 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	150	
R _{thjc}	Thermal resistance junction to case	°C/W	0,03	Direct current, double side cooled

ORDERING

	D	343	1000	30	
	1	2	3	4	

1. Diode
2. Design version
3. Mean forward current, A
4. Voltage code (30=3000 V)



Mounting force : 13 ÷ 19 kN

Weight : 320 grams