AS ENERGI

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Date: 2026.08.13 09:25:17 EEST
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Location: Moldova
MOLDOVA EUROPEANĂ

Avalanche Diode
DL143-800

Average forward current			I_{FAV}	800 A
Repetitive peak reverse voltage			V_{RRM}	2800 - 3400 V
V_{RRM}, V	2800	3000	3200	3400
Voltage class	28	30	32	34
T_j, °C	-60 ... +160			

MAXIMUM RATINGS

Parameters	Symbols	Maximum Limits	Unit
Repetitive peak reverse voltage, T_j = - 60 °C ...+ 160 °C	V_{RRM}	2800 - 3400	V
Non-repetitive peak reverse voltage, T_j = - 60 °C ...+ 160 °C	V_{RSM}	3200 - 3800	
Repetitive reverse current, T_j = 160 °C, $V_R = V_{RRM}$	I_{RRM}	50	mA
Average forward current, T_C = 110 °C, f = 50 Hz	$I_{F(AV)}$	880	A
RMS forward current, T_C = 110 °C, f = 50 Hz	I_{FRMS}	1380	
Non repetitive peak surge current, T_j = 160 °C, V_R = 0, t_p = 10 ms	I_{FSM}	11	kA
I^2t-value	I^2t	$10^3 \cdot 605$	A^2s
Junction temperature range	T_j	-60 ... +160	°C
Storage temperature range	T_{stg}	-60 ... +50	

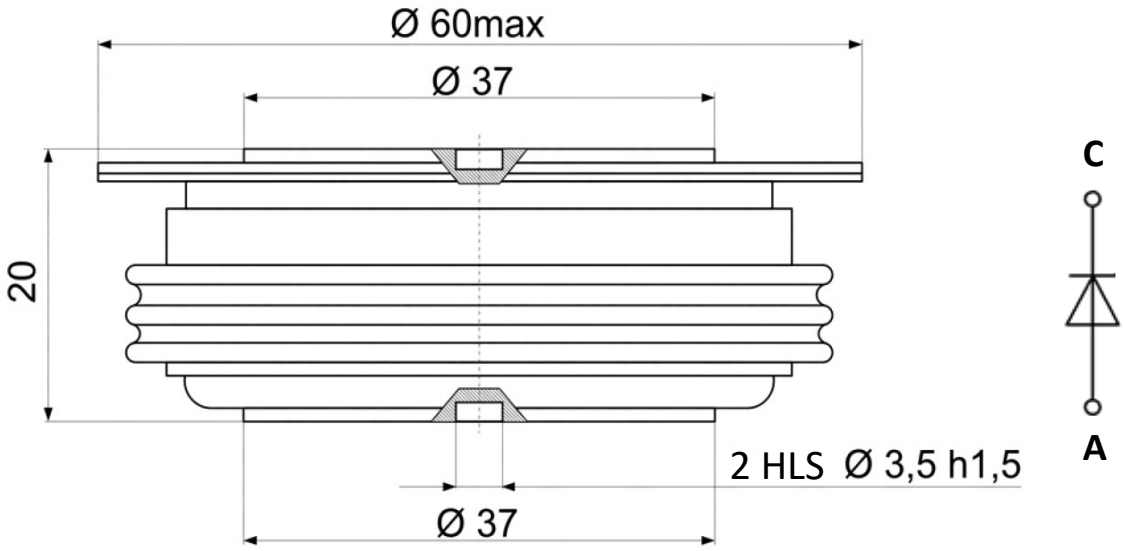
ELECTRICAL CHARACTERISTICS

Parameters	Symbols	Value			Unit
		min	typ	max	
Maximum forward voltage, T_j = 25 °C, I_F = 2500 A	V_{FM}	-	-	1.85	V
Threshold voltage, T_j = 160 °C, I_F = 1250 - 3800 A	V_{TO}	-	-	1.00	V
Forward slope resistance, T_j = 160 °C, I_F = 1250 - 3800 A	r_T	-	-	0.50	mΩ
Maximum avalanche power dissipation, T_j = 160 °C, t_p = 100 µs	P_{RSM}	-	-	16.0	µC

THERMAL PARAMETERS					
Thermal resistance junction to case double side cooling anode side cooling cathode side cooling	$R_{th(j-c)}$	-	-	 0.027 0.054 0.054	°C/W
Thermal resistance case to heatsink double side cooling single side cooling	$R_{th(c-h)}$	-	-	 0.010 0.020	
MECHANICAL PARAMETERS					
Weight	w	-	240	-	g
Clamping force	F	13.5	-	16.5	kN
Maximum permissible continuous acceleration	a	-	-	100	m/s^2

DIMENSIONS

Housing type: PD42, D.C2



C – cathode
A – anode

All dimensions are in millimeters