



Diodes type D74 are of modern design with internal spring loaded contacts, high alumina ceramic insulator and pressure welded encapsulation. Designed for use in power electronic circuits and equipment under normal operating conditions.

KEY PARAMETERS

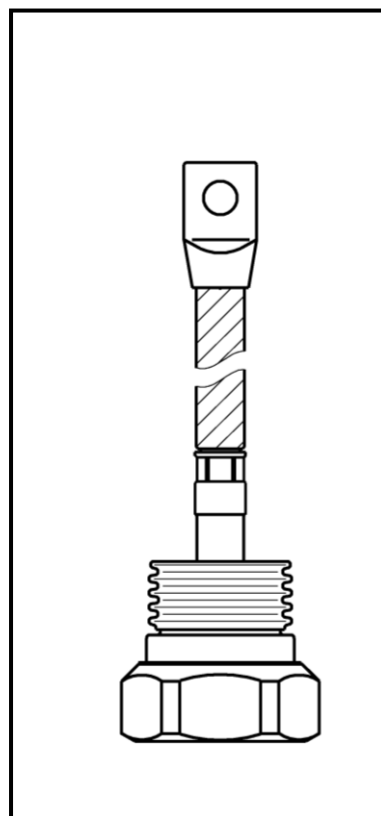
U_{RRM}	up to 4000 V
$I_{F(AV)}$	300 A
I_{FSM}	6300 A

FEATURES

- all diffused design
- high current capabilities
- high surge current capabilities
- high rates voltages
- low thermal impedance
- tested according to IEC standards
- compact size and small weight

APPLICATION

- High Voltage Power Supplies
- Motor Control
- Battery Chargers
- Free Wheeling Diode
- Resistance Welding



See package details for further information

Designed for use in high power industrial and commercial power electronic circuits and equipment where high currents are encountered and high reliability is essential.

D74-300

Diode

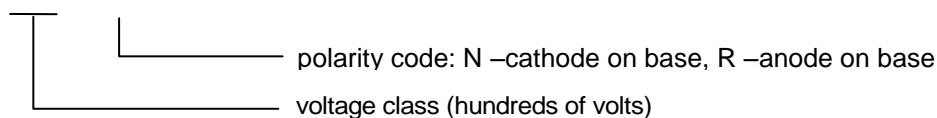


KKD74300, October 2006 version

ORDERING INFORMATION

When ordering please refer to device code builder presented below.
Please use the complete part number when ordering, quote or in any future correspondence relating to your order.

D74-300-□□-□0



ELECTRICAL PARAMETERS

Voltage ratings

Voltage class	U_{RRM}	U_{RSM}	I_{RRM}
	V	V	mA
20	2000	2100	50
22	2200	2300	
24	2400	3500	
26	2600	2700	
28	2800	2900	
30	3000	3100	
32	3200	3300	
34	3400	3500	
36	3600	3700	
38	3800	3900	
40	4000	4100	

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Electrical properties

Parameter		Unit	Test conditions	Value
Average forward current @ case temperature	$I_{F(AV)}$	A		300
	T_C	°C		115
RMS forward current	$I_{F(RMS)}$	A		470
Surge current	I_{FSM}	A	$T_j=T_{jmax}$, $U_R=0,8U_{RRM}$, $t_p=10ms$	6300
I^2t – value	I^2t	kA ² s		200
Forward voltage drop max.	U_{FM}	V	$T_j=25^\circ C$, $I_{FM}=1500A$	2,15
Threshold voltage	$U_{F(T0)}$	V		1.10
Slope resistance	r_F	mΩ		0,90

Thermal properties

Parameter		Unit	Test conditions	Value
Thermal resistance, junction to case	R_{thJC}	°C/W	DC	0,10
Thermal resistance, case to heatsink	R_{thCS}	°C/W		0,04
Operating junction temperature	$T_{jmin} \dots T_{jmax}$	°C		-40...+175
Storage temperature	T_{stg}	°C		-40...+175

Mechanical properties

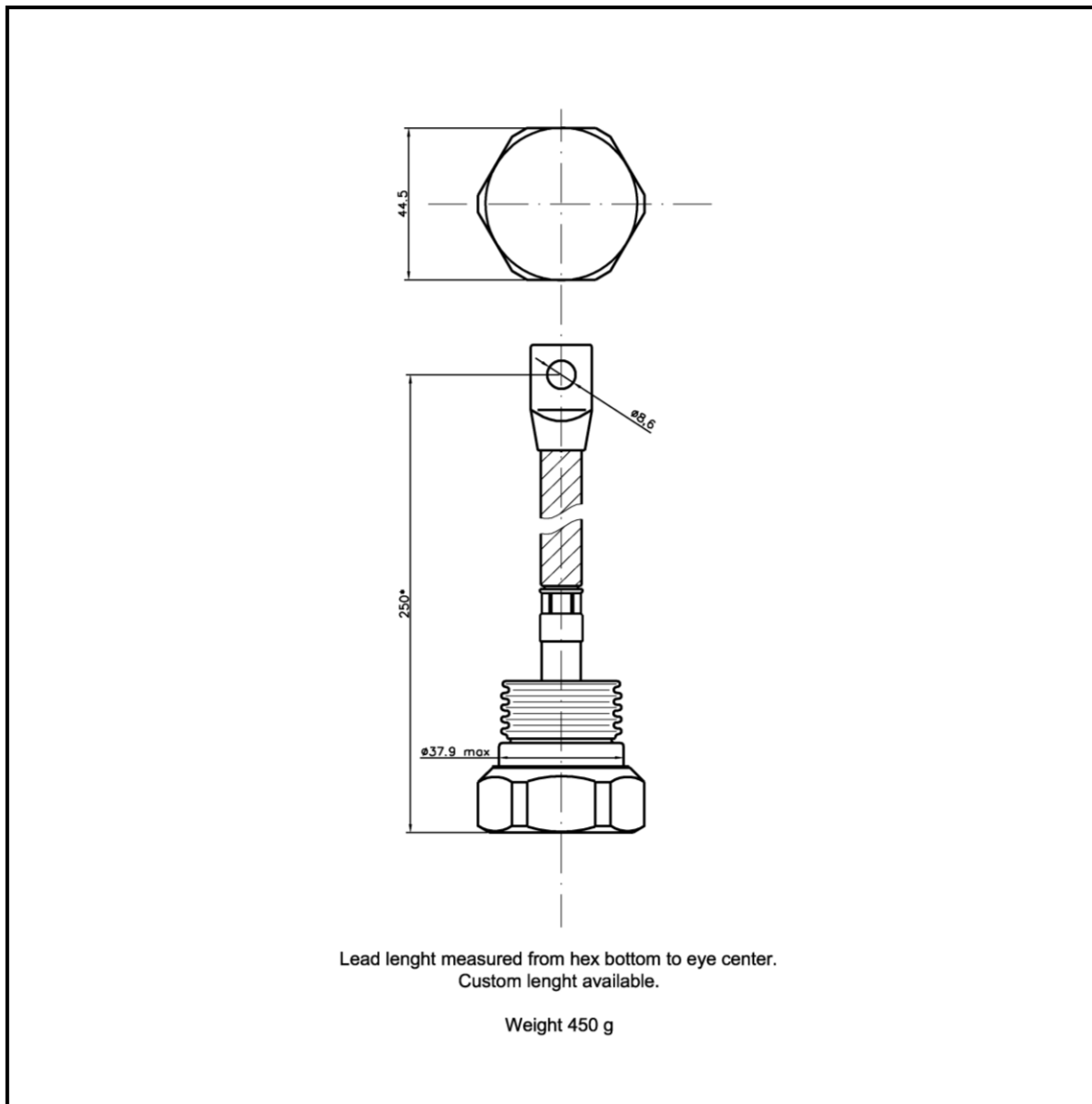
Parameter		Unit	Value
Mounting force	F	kN	5,5
Weight	m	g	450

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Package details



For further package information, please contact Sales & Marketing Department. All dimensions in mm, unless stated otherwise.

Do not scale

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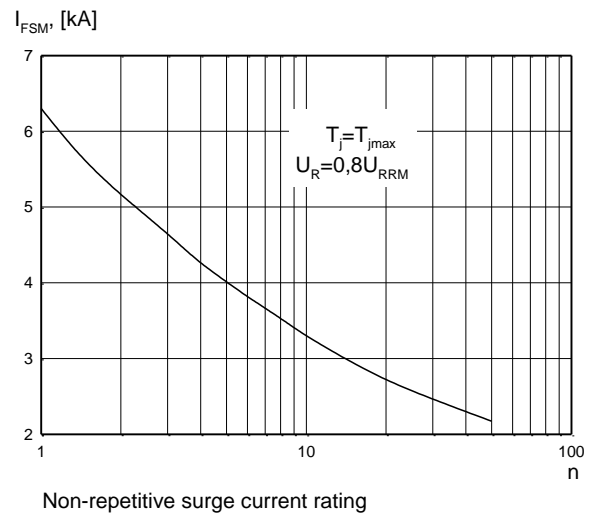
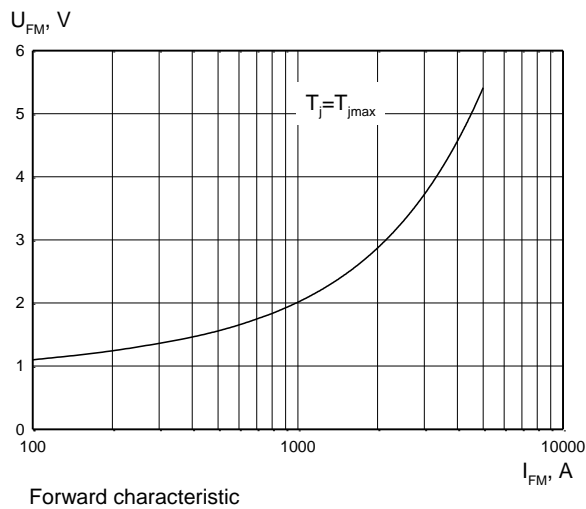
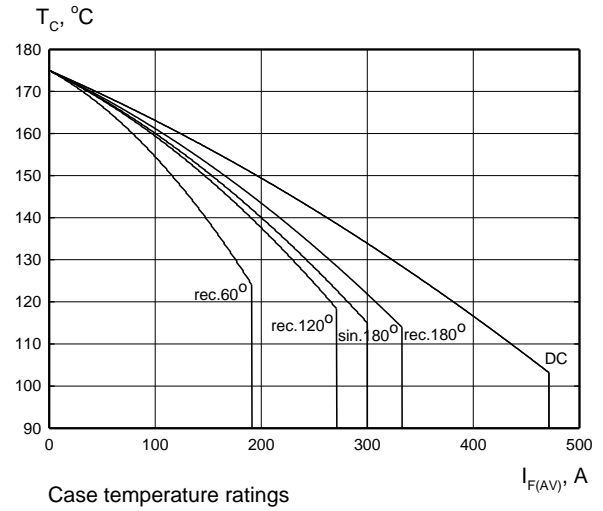
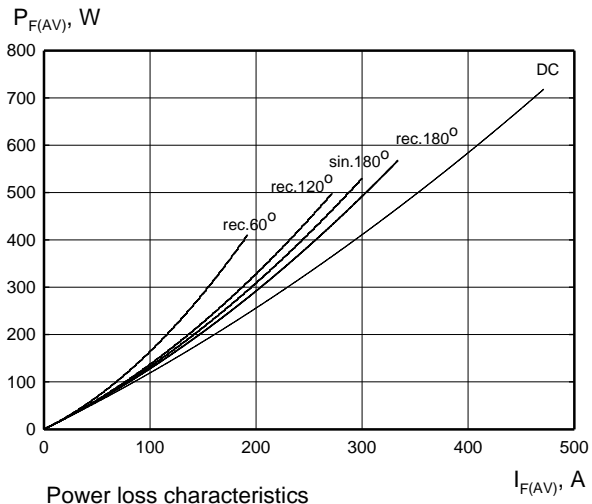
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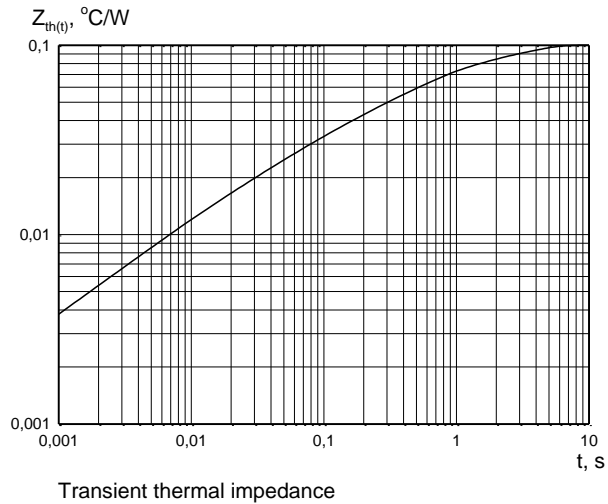
CHARACTERISTICS



D74-300

Diode

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HEATSINKS

LAMINA S.I. has its own proprietary range of extruded aluminium heatsinks designed to optimise the performance of our semiconductors with natural and forced air flow.

POWER ASSEMBLY CAPABILITY

LAMINA S.I. provides a support for those customers requiring more than a basic semiconductor and offers precisely assembled Power Blocks according to factory or customer standards.