



Diodes type D66 are of modern design with internal spring loaded contacts and pressure welded glass-to-metal seal. Designed for use in power electronic circuits and equipment under normal operating conditions.

### KEY PARAMETERS

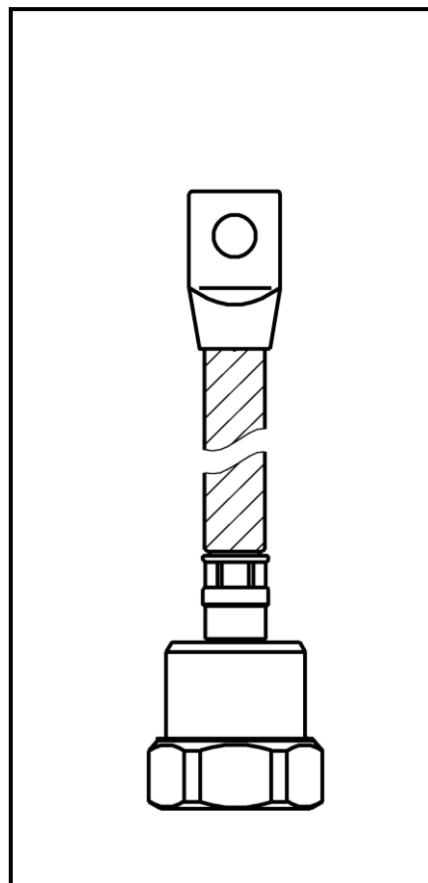
$U_{RRM}$	up to 1600 V
$I_{F(AV)}$	250 A
$I_{FSM}$	5500 A

### 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.

# D66-250

## Diode

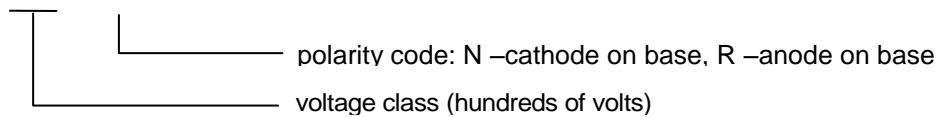


KKD66250, October 2006 version

### 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.

**D66-250-**   -  **0**



### ELECTRICAL PARAMETERS

#### Voltage ratings

Voltage class	$U_{RRM}$	$U_{RSM}$	$I_{RRM}$
	V	V	mA
04	400	500	50
06	600	700	
08	800	900	
10	1000	1100	
12	1200	1300	
14	1400	1500	
16	1600	1700	

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# D66-250

## Diode

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### Electrical properties

Parameter		Unit	Test conditions	Value	
Average forward current @ case temperature	$I_{F(AV)}$	A		250	
	$T_c$	°C		$U_{RRM} \leq 1200V$	140
				$U_{RRM} > 1200V$	125
RMS forward current	$I_{F(RMS)}$	A		395	
Surge current	$I_{FSM}$	A	$T_j = T_{jmax}, U_R = 0,8U_{RRM}, t_p = 10ms$	5500	
$I^2t$ – value	$I^2t$	kA <sup>2</sup> s		150	
Forward voltage drop max.	$U_{FM}$	V	$T_j = 25^\circ C, I_{FM} = 800A$	1,60	
Threshold voltage	$U_{F(T0)}$	V		0,70	
Slope resistance	$r_F$	mΩ		1,22	

### Thermal properties

Parameter		Unit	Test conditions	Value	
Thermal resistance, junction to case	$R_{thJC}$	°C/W	DC	0,12	
Thermal resistance, case to heatsink	$R_{thCS}$	°C/W		0,10	
Operating junction temperature	$T_{jmin} \dots T_{jmax}$	°C		$U_{RRM} \leq 1200V$	-40...+190
				$U_{RRM} > 1200V$	-40...+175
Storage temperature	$T_{stg}$	°C		-40...+190	

### Mechanical properties

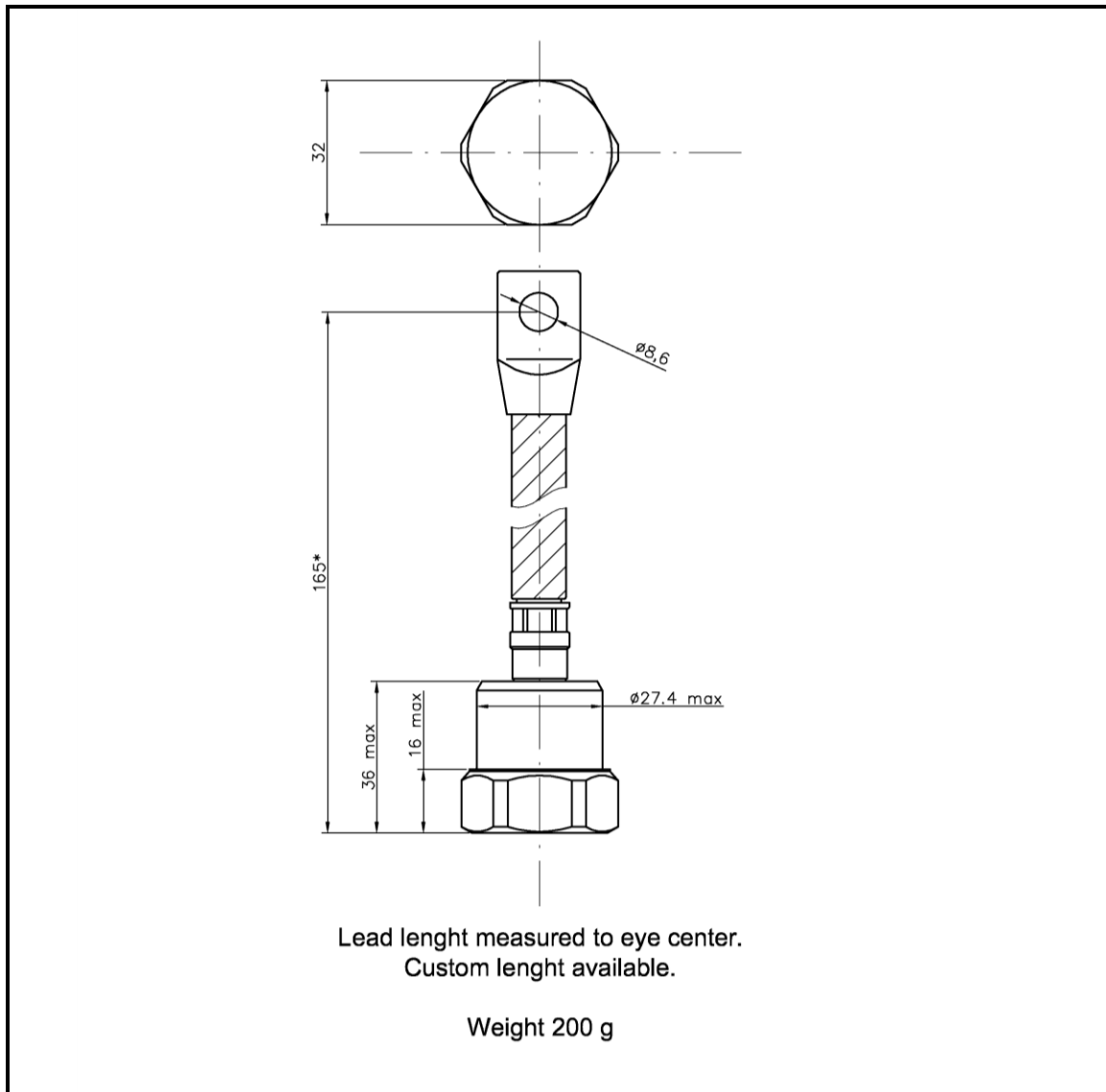
Parameter		Unit	Value
Mounting force	F	kN	3,5
Weight	m	g	200

# D66-250

## Diode

KKD66250, October 2006 version

### 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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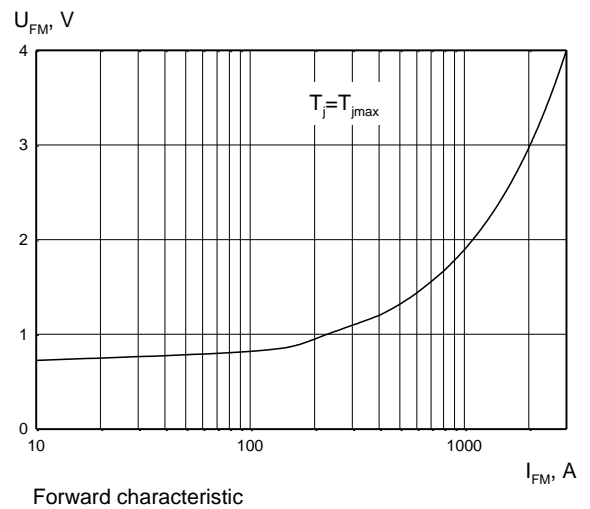
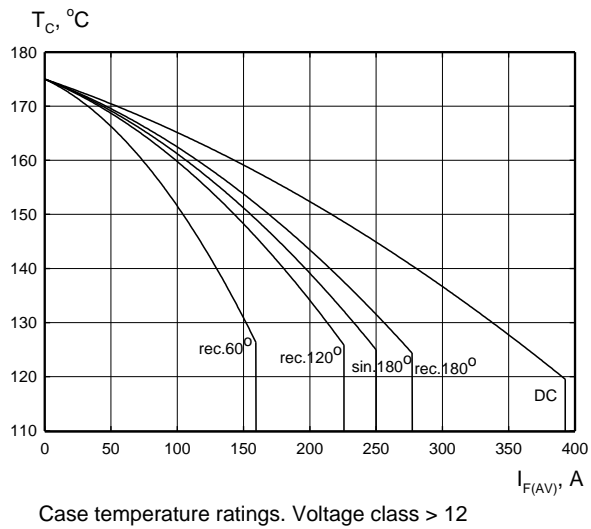
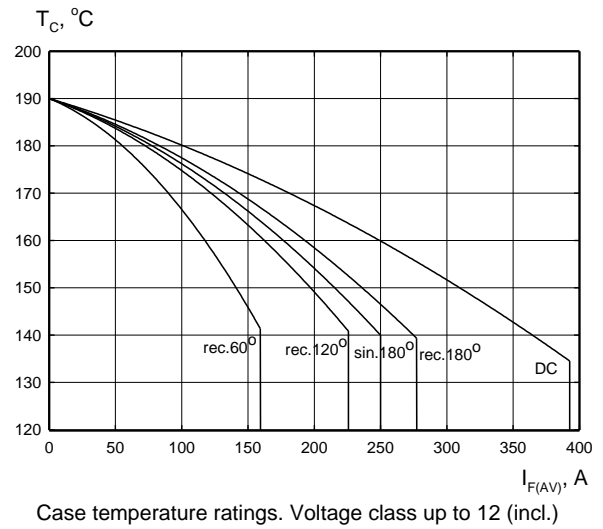
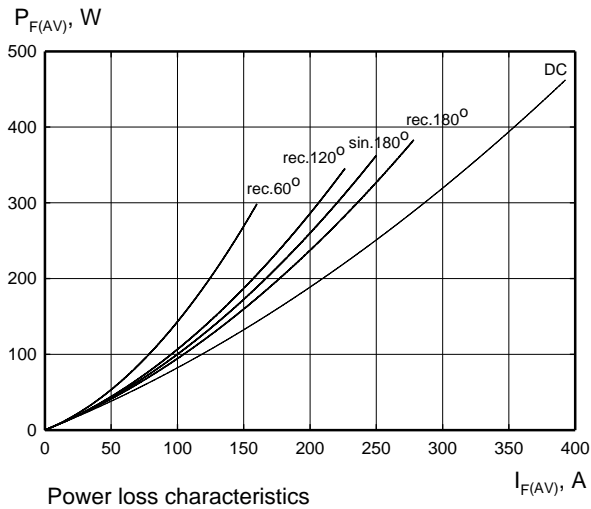
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# D66-250

## Diode

KKD66250, October 2006 version

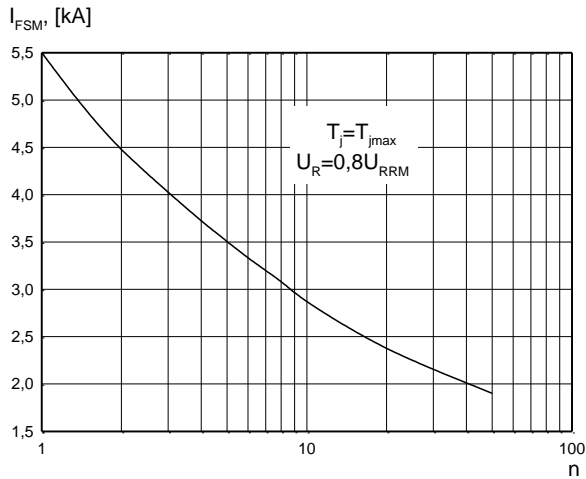
### HARACTERISTICS



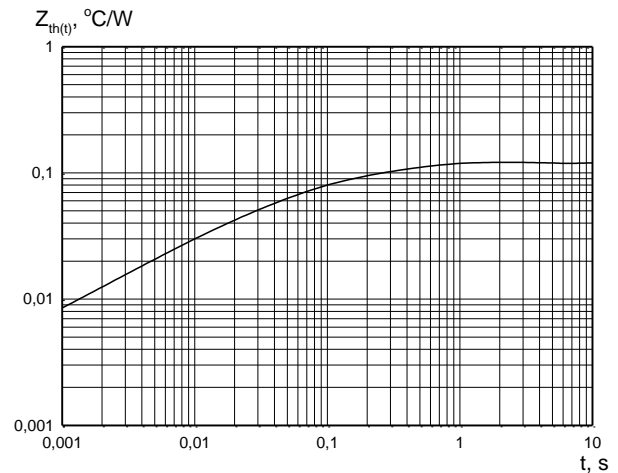
# D66-250

## Diode

KKD66250, October 2006 version



Non-repetitive surge current rating



Transient thermal impedance

## 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.