

Diodes type D52 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

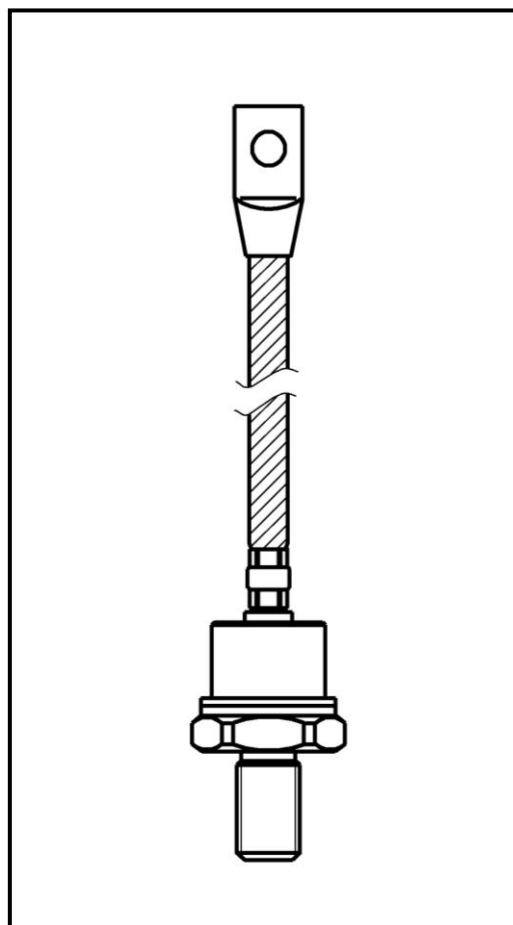
$U_{RRM}$	up to 1600 V
$I_{F(AV)}$	150 A
$I_{FSM}$	2700 A

## 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



Outline type code: JEDEC DO-205AC

See package details for further information

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

# D52-150

## Diode

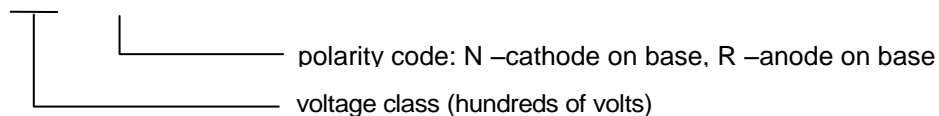


KKD52150, October 2006 version

### 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.

**D52-150-□□-□0**



### ELECTRICAL PARAMETERS

#### Voltage ratings

Voltage class	$U_{RRM}$	$U_{RSM}$	$I_{RRM}$
	V	V	mA
04	400	500	20
06	600	700	
08	800	900	
10	1000	1100	
12	1200	1300	
14	1400	1500	
16	1600	1700	

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# D52-150

## Diode



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**LAMINA S.A.**

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### Electrical properties

Parameter	Unit	Test conditions	Value
Average forward current @ case temperature	$I_{F(AV)}$	A	150
	$T_C$	°C	$U_{RRM} \leq 1200V$ 120 $U_{RRM} > 1200V$ 105
RMS forward current	$I_{F(RMS)}$	A	235
Surge current	$I_{FSM}$	A	$T_j = T_{jmax}, U_R = 0,8U_{RRM},$ $t_p = 10ms$ 2700
$I^2t$ – value	$I^2t$	kA <sup>2</sup> s	36
Forward voltage drop max.	$U_{FM}$	V	$T_j = 25^\circ C, I_{FM} = 470A$ 1.80
Threshold voltage	$U_{F(T0)}$	V	1,05
Slope resistance	$r_F$	mΩ	1.66

### Thermal properties

Parameter	Unit	Test conditions	Value
Thermal resistance, junction to case	$R_{thJC}$	°C/W	DC 0,25
Thermal resistance, case to heatsink	$R_{thCS}$	°C/W	0,12
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 torque	M	Nm 14 ... 17
Weight	m	g 130

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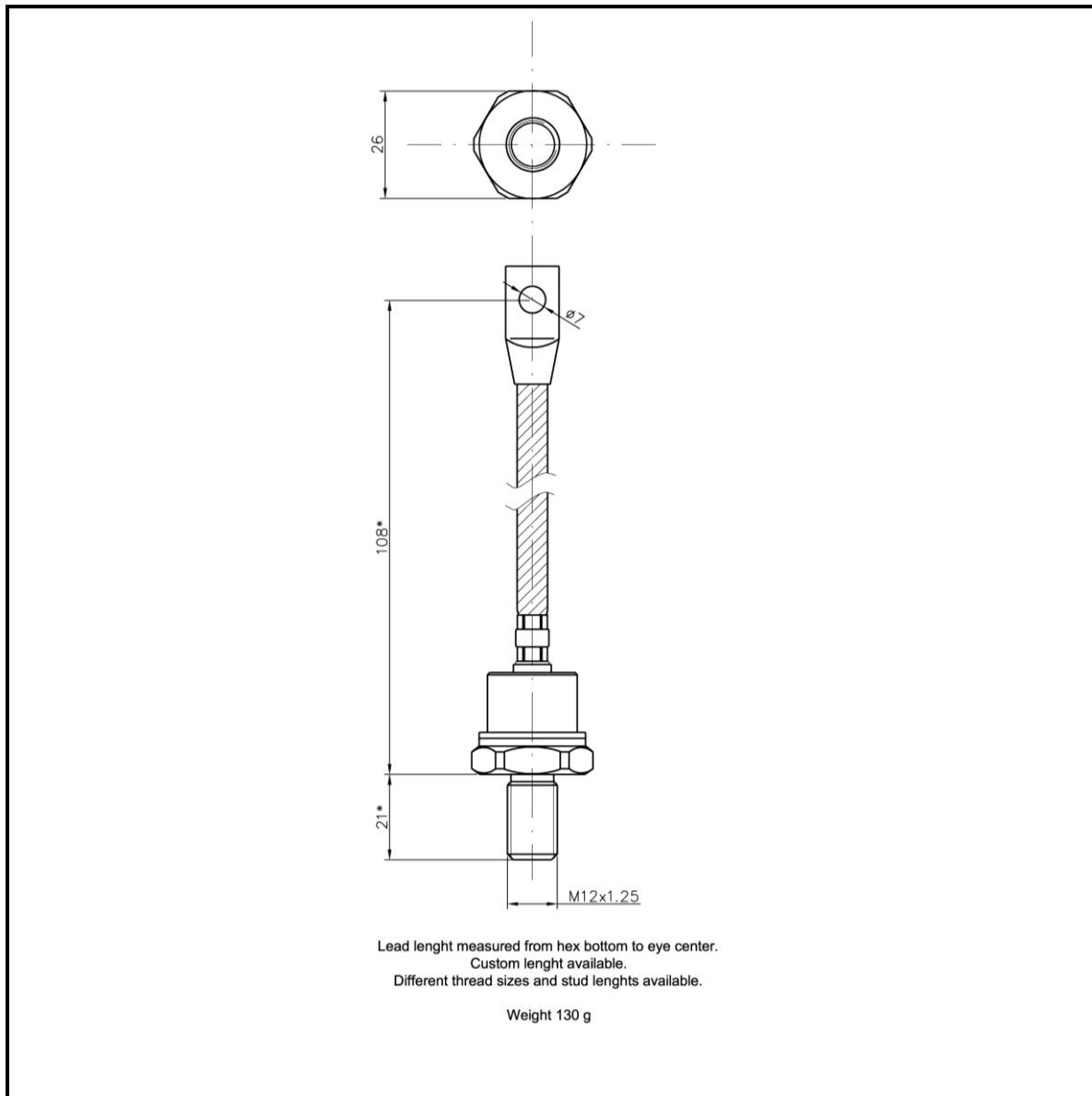
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# D52-150

## Diode

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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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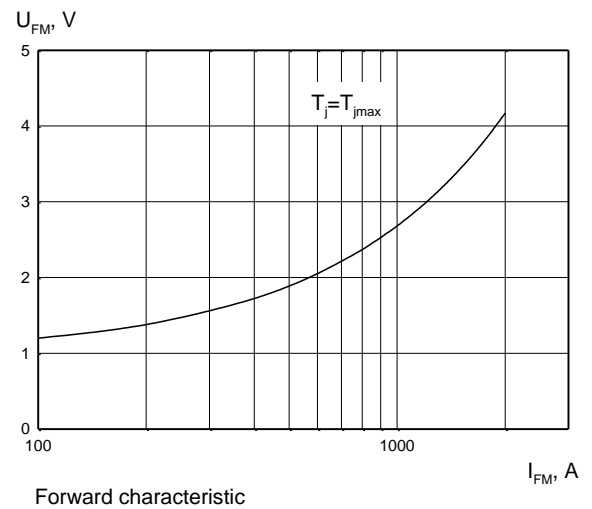
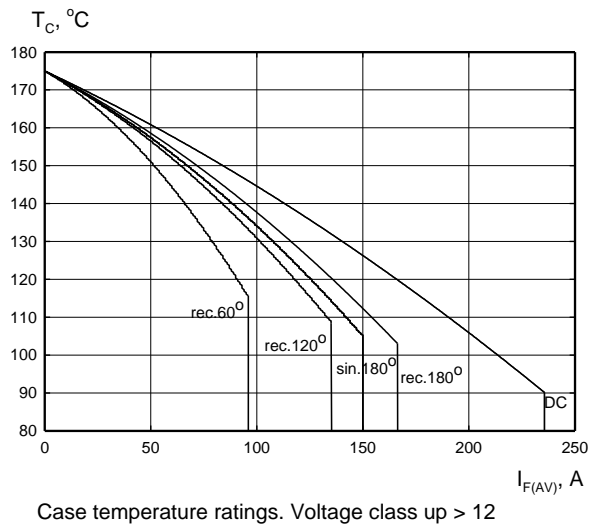
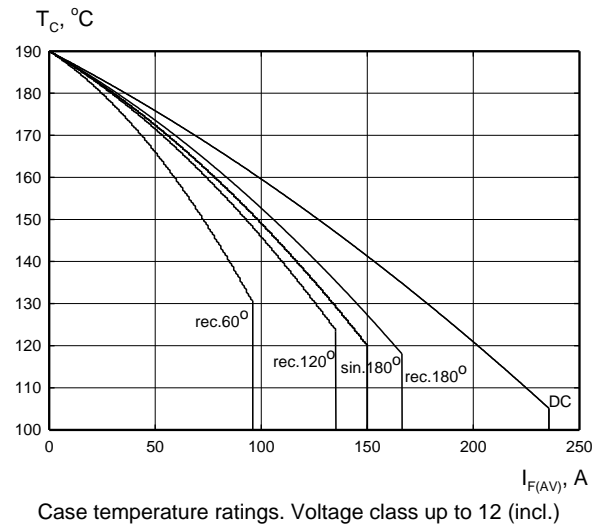
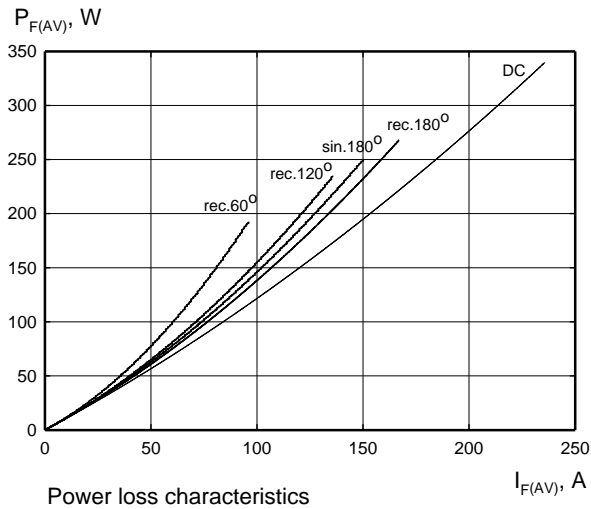
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# D52-150

## Diode

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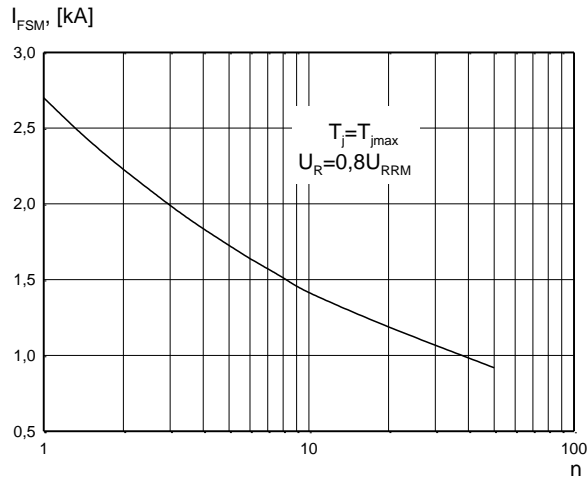
### CHARACTERISTICS



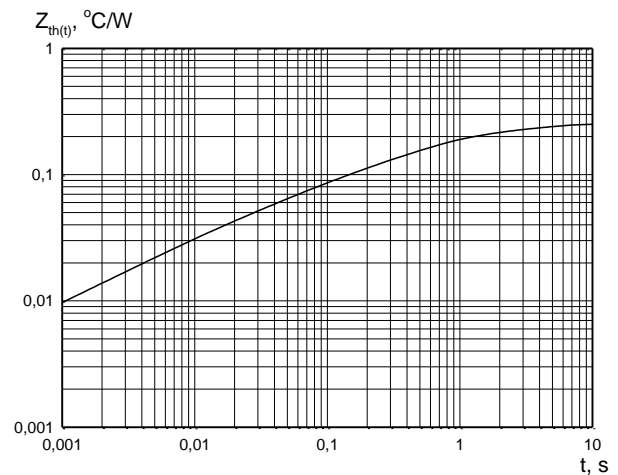
# D52-150

## Diode

KKD52150, 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.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

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