

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**

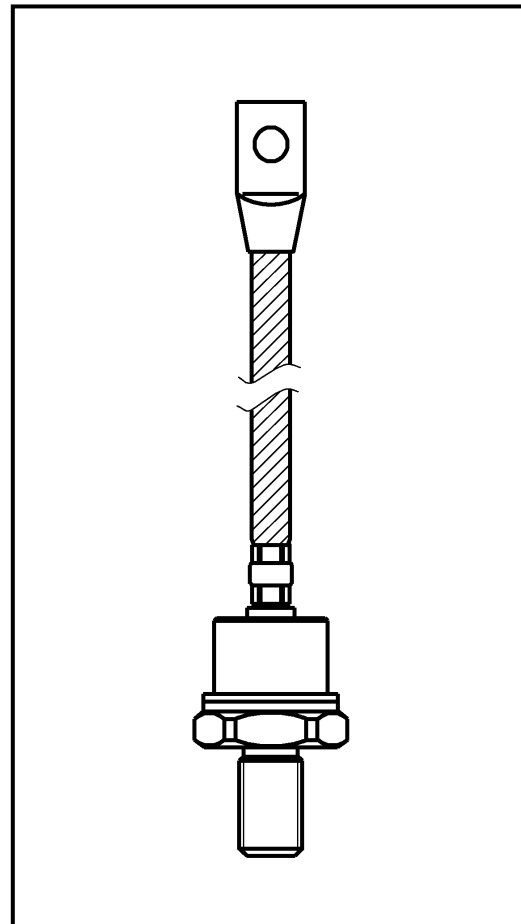
<b>U<sub>RRM</sub></b>	<b>up to 1600 V</b>
<b>I<sub>F(AV)</sub></b>	<b>200 A</b>
<b>I<sub>FSM</sub></b>	<b>2900 A</b>

**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.

# D52-200

## Diode

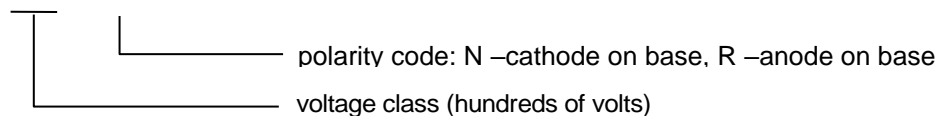


KKD52200, January 2014 version

### 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.

**D52-200-**□□-□**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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# D52-200

## Diode

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### Electrical properties

Parameter	Unit	Test conditions	Value
Average forward current @ case temperature	$I_{F(AV)}$	A	200
	$T_C$	°C	$U_{RRM} \leq 1200V$ 110 $U_{RRM} > 1200V$ 95
RMS forward current	$I_{F(RMS)}$	A	315
Surge forward current	$I_{FSM}$	A	$T_j = T_{jmax}$ , $U_R = 0,8U_{RRM}$ , $t_p = 10ms$
$I^2t$ – value	$I^2t$	kA <sup>2</sup> s	42
On-state voltage max.	$U_{FM}$	V	$T_j = 25^\circ C$ , $I_{FM} = 470A$
Threshold voltage	$U_{F(T0)}$	V	0,90
Slope resistance	$r_F$	mΩ	1.07

### Thermal properties

Parameter	Unit	Test conditions	Value
Thermal resistance, junction to case	$R_{thJC}$	DC	0,25
Thermal resistance, case to heatsink	$R_{thCS}$		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

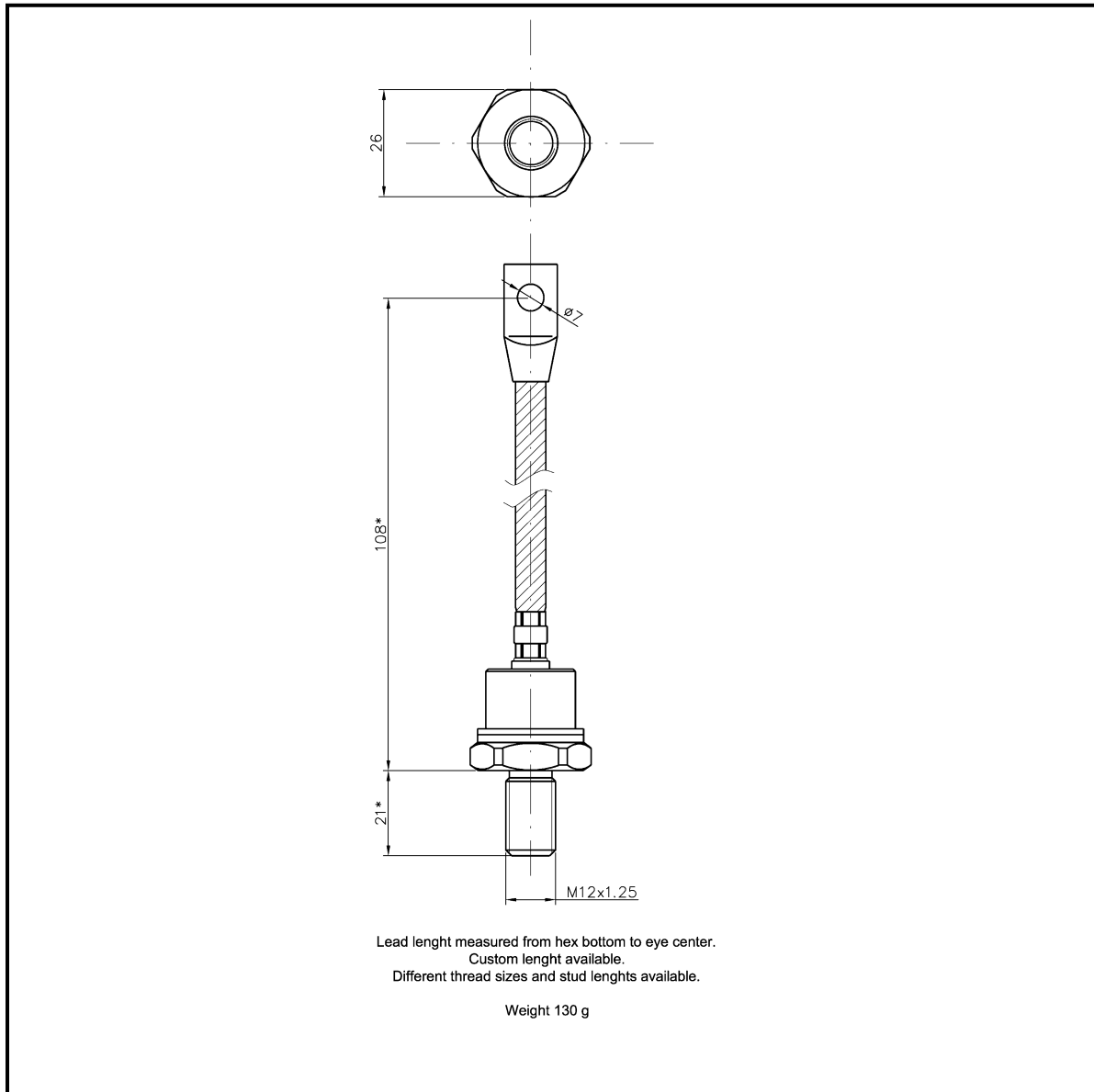
Parameter	Unit	Value
Mounting torque	M	Nm
Weight	m	g

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## 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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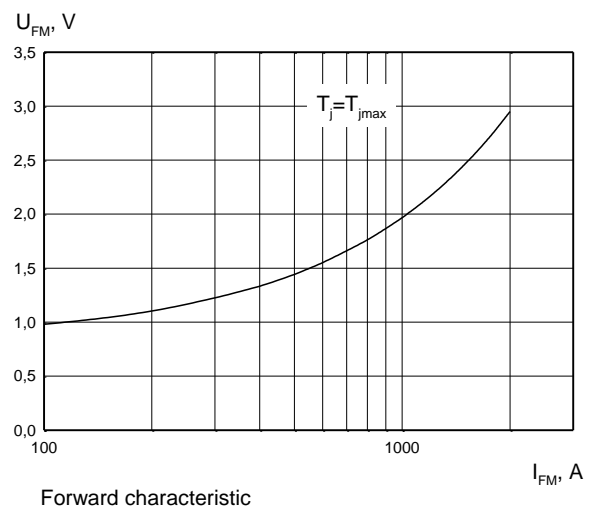
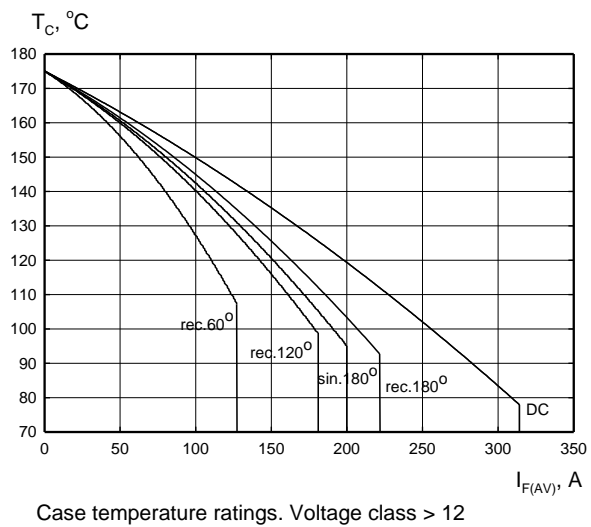
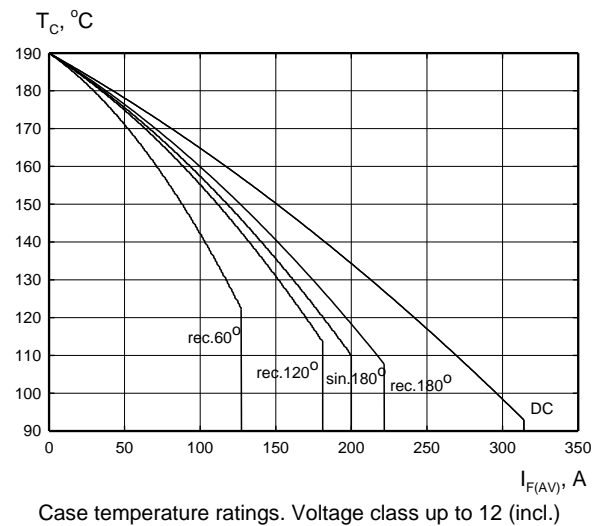
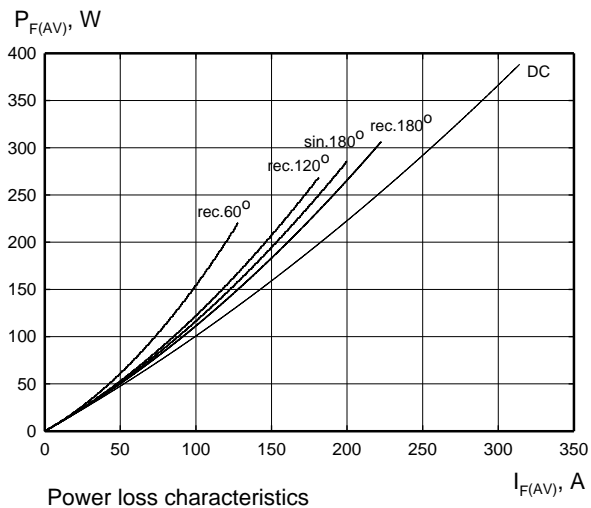
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## Diode

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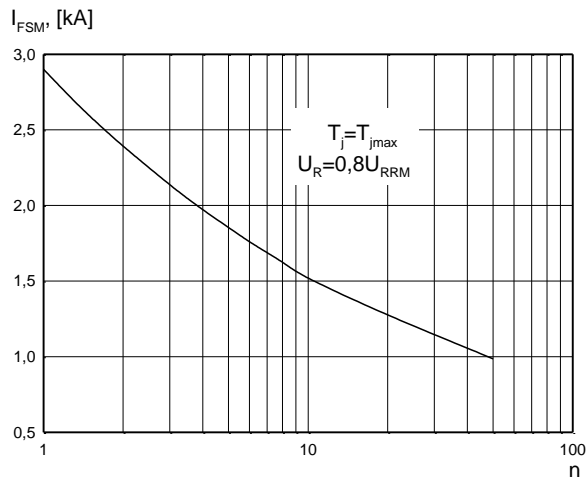
### CHARACTERISTICS



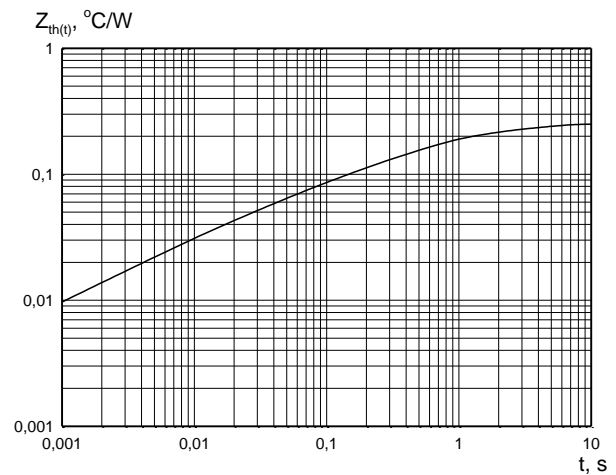
# D52-200

## Diode

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Non-repetitive surge current rating



Transient thermal impedance

## HEATSINKS

**KUBARA LAMINA SA** 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

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

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