Zakłady Elektronowe
LAMINA S.A.

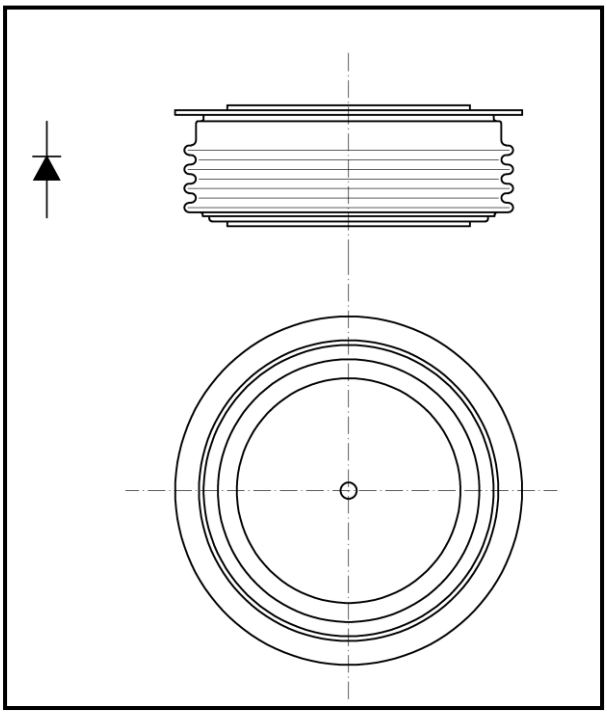
KKR95900, March 2004 version

R95-900
Fast Recovery Diode

Diode type R95 are of modern design with pressure contacts, high alumina ceramic insulator and cold-welded encapsulation. Designed for use in power rectifying circuits and equipment under normal operating conditions.

KEY PARAMETERS

U_{RRM}	**up to 3600 V**
$I_{F(AV)}$	**900 A**
I_{FSM}	**14000 A**
t_{rr}	**down to 4µs**



FEATURES

- all diffused design
- high current capabilities
- high surge current capabilities
- high rated voltages
- low thermal impedance
- tested according to IEC standards
- compact size and small weight
- fast reverse recovery
- low Q_r values

APPLICATION

- High Voltage Power Supplies
- A.C. Motor Control
- Battery Chargers
- Inverters and choppers
- Uninterruptible power supplies

Outline type code: JEDEC DO-200AC
See Package Details for further information

Designed for use in high power industrial and commercial electronic circuits and equipment where high currents are encoutered, high reliability is essential and short reverse recovery times, as well as low recovery charge values are required.

Zakłady Elektronowe LAMINA *S.A.*
Puławska 34
PL-05-500 Piaseczno
POLAND

Tel.: +48-22-7572731
Tel.: +48-22-3989409
Fax.: +48-22-3989407
e-mail: sekretariat@lamina.com.pl
www.lamina.com.pl

R95-900
Diode

Zakłady Elektronowe LAMINA S.A.

KKR95900, March 2004 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.

R95-900-□□-□

- t_{rr} group code
- voltage class (hundreds of volts)

ELECTRICAL PARAMETERS

Voltage ratings

Voltage class	U_{RRM}	U_{RSM}	I_{RRM}
	V	V	mA
22	2200	2300	50
24	2400	2500	
26	2600	2700	
28	2800	2900	
30	3000	3100	
32	3200	3300	
34	3400	3500	
36	3600	3700	

Recovery time codes

t_{rr} group code	1	2
t_{rr} [µs]	5	4

Electrical properties

Parameter		Unit	Test conditions	Value
Average forward current @ case temperature	$I_{F(AV)}$	A		900
	T_c	°C		70
RMS forward current	$I_{F(RMS)}$	A		1415
Surge current	I_{FSM}	A	T_j=150°C, U_R=0,8U_{RRM}, t_p=10ms	14000
I^2t – value	I^2t	kA^2s		980
Forward voltage drop max.	U_{FM}	V	T_j=25°C, I_{FM}=1500A	3,0
Reverse recovery time	t_{rr}	µs	T_j=25°C, I_{FM}=1500A, di_R/dt=25A/ µs	4,0 for up to 3000V 5,0 for up to 3600V

Zakłady Elektronowe LAMINA *S.A.*
Puławska 34
PL-05-500 Piaseczno
POLAND

Tel.: +48-22-7572731
Tel.: +48-22-3989409
Fax.: +48-22-3989407
e-mail: sekretariat@lamina.com.pl
www.lamina.com.pl

R95-900
Diode

KKR95900, March 2004 version

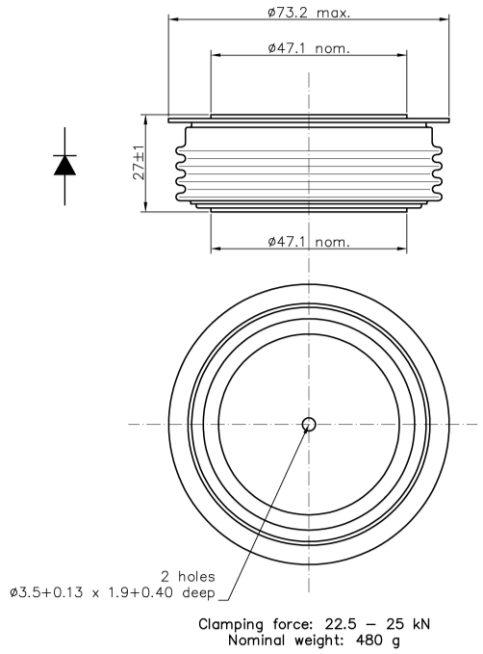
Termal properties

Parameter		Unit	Test conditions	Value
Thermal resistance, junction to case	R_{thJC}	°C/W	two sided, DC	0,023
Thermal resistance, case to heatsink	R_{thCS}	°C/W	two sided	0,010
Operating junction temperature	$T_{jmin}...T_{jmax}$	°C		-40...+150
Storage temperature	T_{stg}	°C		-40...+150

Mechanical properties

Parameter		Unit	Value
Clamping force	F_M	kN	22,5 ... 25,0
Weight	m	g	480

Package details



For further package information, please contact Sales & Marketing Department. All dimensions in mm, unless stated otherwise.
Do not scale.

Zakłady Elektronowe LAMINA *S.A.*
Puławska 34
PL-05-500 Piaseczno
POLAND

Tel.: +48-22-7572731
Tel.: +48-22-3989409
Fax.: +48-22-3989407
e-mail: sekretariat@lamina.com.pl
www.lamina.com.pl

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. High efficiency water cooled copper heatsinks are also available.

DEVICE CLAMPS

Disc devices require the correct clamping force to ensure their best operation. LAMINA S.I. offers a wide selection of clamps to suit all of our manufactured devices.

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.

Zakłady Elektronowe LAMINA *S.A.*
Puławska 34
PL-05-500 Piaseczno
POLAND

Tel.: +48-22-7572731
Tel.: +48-22-3989409
Fax.: +48-22-3989407
e-mail: sekretariat@lamina.com.pl
www.lamina.com.pl