

LAMINA S.I.



SEMICONDUCTOR POWER DEVICES

DIODES



Marking

D61□ - 250 - 22 - NO - □□□ - □

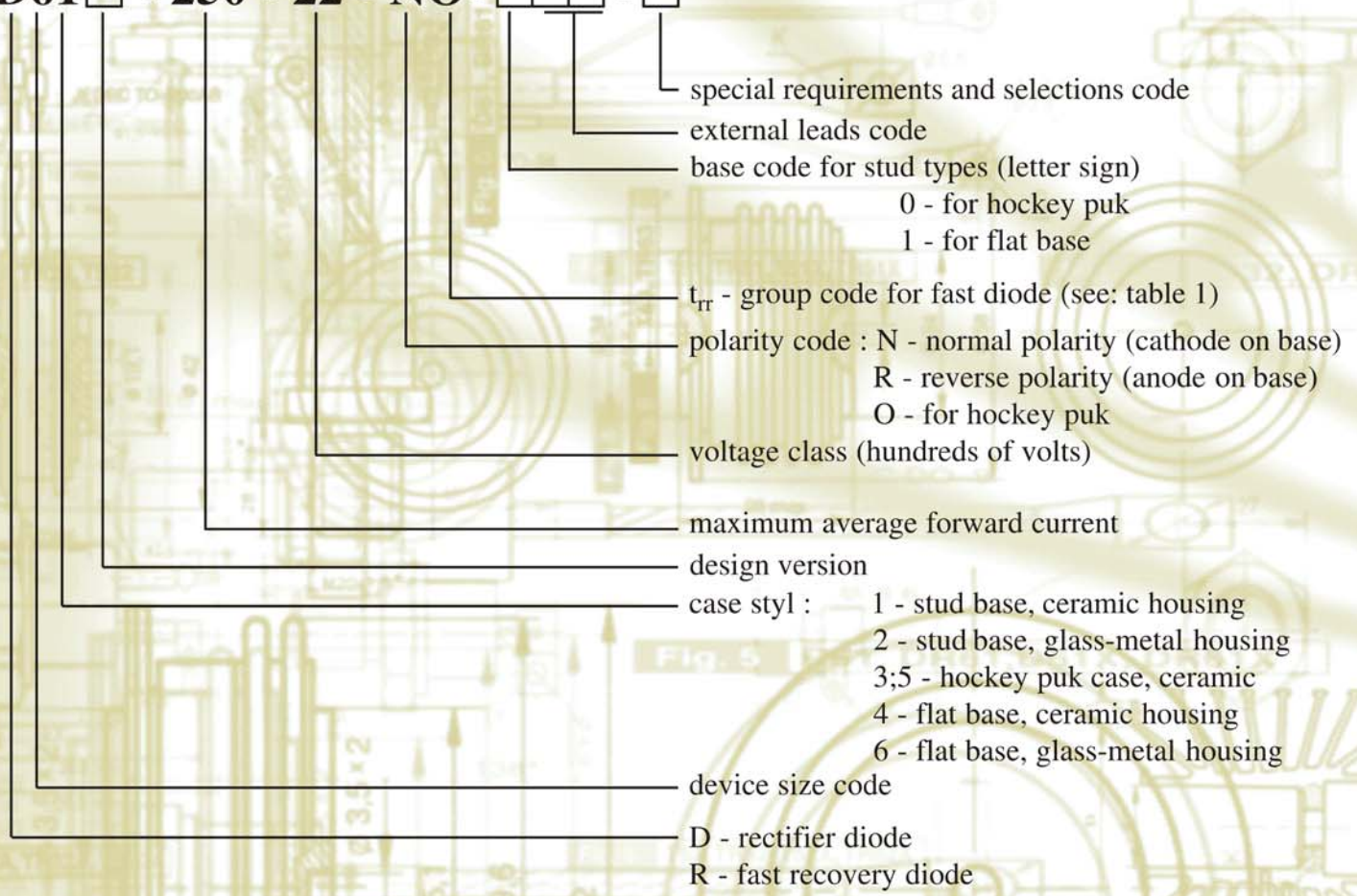


Table 1

t_{rr} code	1	2	3	4	5	6	7	8	9	0
t_{rr} μ s	5,0	4,0	3,2	2,5	2,0	1,6	1,0	0,63	0,40	no specified value

Letter symbols:

- $I_{F(AV)}$ - average forward current
- I_{FSM} - surge current
- U_{RRM} - repetitive peak reverse voltage
- I^2t - I^2t for fusing, 10 ms
- t_{rr} - reverse recovery time
- U_{FM} - peak forward voltage
- I_{FM} - peak forward current
- T_C - case temperature
- R_{thjc} - thermal resistance junction to case
- R_{ther} - thermal resistance case to heatsink
- $U_{F(TO)}$ - threshold voltage
- r_F - slope resistance

Type codes - new and old ones

New code	Old code
D51	D51
D51	D52
D52	D51X
D52	D52X
R52	DR51X
R52	DR52X
D61	D61
D62	D61X
D63	D63
D64	D67
D66	D67X
D64	D69
R61	DR61
R62	DR61X
R63	DR63
D71	D71
D73	D73
D75	D73E
R71	DR71
R73	DR73
R75	DR73E
D83	D83
R83	DR83
D95	D93G
R95	DR93G

Rectifier Diodes

TYPE	$I_{F(AV)}/T_C$	U_{RRM}	I_{FSM}	I^2t	$U_{F(TO)}$	r_F	R_{thjc}	R_{thcr}	U_{FM}/I_{FM}	Mounting torque (Nm) or force (kN)	Figure
	A/°C	V	kA	kA ² s	V	mΩ	°C/W	°C/W	V/A		
D22-10	10/105	100-1600	0,19	0,180	1,15	14	2,00		1,50/31,4	1,2-1,5 Nm	1
D22-16	16/105	100-1400	0,25	0,312	1,15	8	2,00		1,70/50	1,2-1,5 Nm	1
D22-20	20/110	100-1400	0,275	0,378	1,15	7	1,50		1,50/50	1,2-1,5 Nm	1
D22-25	25/120	100-1400	0,275	0,378	1,15	7			1,50/50	1,2-1,5 Nm	1
D42-32	32/100	100-1400	0,50	1,25	1,00	7	0,90		1,70/100	2,0-2,5 Nm	2
D42-40	40/95	100-1400	0,60	1,80	1,00	4	0,90		1,40/100	2,0-2,5 Nm	2
D42-50	50/100	100-1400	0,80	3,20	0,95	4,5	0,60		1,80/200	2,0-2,5 Nm	2
D42-60	60/100	100-1400	0,85	3,60	0,80	3,1	0,60		1,40/200	2,0-2,5 Nm	2
D42-70	70/100	100-1400	0,95	4,50	0,80	2,3	0,55		1,35/200	2,0-2,5 Nm	2
D 52-100	100/140	400-1200	2,10	22	1,20	2,37	0,25	0,12	2,20/470	14,0-17,0 Nm	3,4
	100/125	1400-1600									
D 51-100	100/125	1800-2000	2,70	36	1,05	1,66	0,25	0,12	1,80/470	14,0-17,0 Nm	3,4
D 52-150	150/120	400-1200									
D 52-200	150/105	1400-1600	2,90	42	0,90	1,07	0,25	0,12	1,45/470	14,0-17,0 Nm	3,4
	200/110	400-1200									
D 62-200, D 66-200	200/145	400-1200	5,00	125	0,96	1,00	0,14	0,10	1,70/800	28,0-32,0 Nm 3,5 kN	5,6
	200/130	1400-1600									
D 61-200, D 64-200	200/130	1800-3200	5,50	150	0,85	0,72	0,14	0,10	1,50/800	28,0-32,0 Nm 3,5 kN	5,6
	250/140	400-1200									
D 62-250, D 66-250	250/125	1400-1600	6,30	198	0,69	0,99	0,14	0,10	1,40/800	28,0-32,0 Nm 3,5 kN	5,6
	250/125	1800-3200									
D 62-320, D 66-320	320/125	400-1200	7,0	245	0,62	0,563	0,12	0,10	1,2/800	28,0-32,0 Nm 3,5 kN	5,6
	320/110	1400-1600									
D 61-320, D 64-320	320/110	1800-2000	7,0	245	0,62	0,563	0,12	0,10	1,2/800	28,0-32,0 Nm 3,5 kN	5,6
	400/125	400-1200									
D 62-400, D 66-400	400/110	1400-1600	9,00	405	0,63	0,34	0,10	0,04	1,20/1500	38,0-41,0 Nm 5,5 kN	7,8
	400/110	1800-2000									
D 61-400, D 64-400	400/110	1800-2000	9,00	405	0,63	0,34	0,10	0,04	1,20/1500	38,0-41,0 Nm 5,5 kN	7,8
	600/115	400-1200									
D 71-300, D 74-300	300/115	2000-4000	6,30	200	1,10	0,90	0,10	0,04	2,15/1500	38,0-41,0 Nm 5,5 kN	7,8
D 71-450, D 74-450	450/125	400-1200	7,70	300	0,72	0,51	0,10	0,04	1,60/1500	38,0-41,0 Nm 5,5 kN	7,8
	450/110	1400-3200									
D 71-600, D 74-600	600/115	400-1200	9,00	405	0,63	0,34	0,10	0,04	1,20/1500	38,0-41,0 Nm 5,5 kN	7,8
D 63-300	300/140	400-1200	5,00	125	0,95	0,85	0,095	0,02	1,70/800	4,5-6,2 kN	9
	300/125	1400-3200									
D 63-400	400/125	400-1200	5,50	150	0,85	0,72	0,095	0,02	1,50/800	4,5-6,2 kN	9
	400/110	1400-3200									
D 63-600	600/95	400-1200	6,40	204	0,68	0,57	0,095	0,02	1,20/800	4,5-6,2 kN	9
D 73-500	500/115	2200-4400	6,40	204	0,8	0,61	0,07	0,02	1,80/1500	9,0-11,0 kN	10
D 73-800	800/95	400-1200	7,70	300	0,7	0,426			1,60/1500		
	800/80	1400-3200									
D 75-1100	1100/75	1400-2400	9,00	405	0,763	0,48	0,04	0,02	1,38/1500	9,0-11,0 kN	11
D 75-1400	1400/75	400-1200	11,00	605	0,76	0,308			1,20/1500		

Rectifier Diodes (continued)

TYPE	$I_{F(AV)}/T_C$	U_{RRM}	I_{FSM}	I^2t	$U_{F(TO)}$	r_F	R_{thjc}	R_{thcr}	U_{FM}/I_{FM}	Clamping force (kN)	Figure
	A/°C	V	kA	kA ² s	V	mΩ	°C/W	°C/W	V/A		
D83-1000	1000/65	400-4400	11,4	650	0,87	0,73	0,037	0,02	1,70/1500	12,0-14,0	10
D83-1200	1200/85	1600-3200	14,8	1090	0,82	0,34					
D83-1400	1400/70	400-2000	15,8	1250	0,78	0,30					
D83-1600	1600/75	400-1200	16,7	1400	0,77	0,191					
D95-1600	1600/95	3200-4400	17,0	1440	0,77	0,375	0,020	0,01	1,30/1500	22,5-25,0	12
D95-1800	1800/130	400-2000	20,0	2000	0,81	0,162					
	1800/115	2200-3200									
D95-2200	2200/110	400-2000	23,0	2640	0,80	0,154					
	2200/95	2200-3000									
D95-2500-...-T	2500/85	1600-2400	22,0	2400	0,62	0,164	0,020	0,01	1,05/1500	22,5-25,0	12
D95-3000	3000/105	200-1200	25,0	3120	0,70	0,082	0,020	0,01	1,00/1500	22,5-25,0	12
D95-3000-...-T	3000/60	1600-2200	25,0	3120	0,612	0,164	0,020	0,01	1,02/1500	22,5-25,0	12
DB3-4000	4000/85	3600-4000	65,5	17900	0,80	0,118	0,0115	0,002	1,31/4000	26,5-44,5	13

Fast Recovery Diodes

TYPE	$I_{F(AV)}/T_C$	U_{RRM}	I_{FSM}	I^2t	$t_{rr}(25^\circ\text{C})$	R_{thjc}	R_{thcr}	U_{FM}/I_{FM}	Mounting torque (Nm) or Clamping force (kN)	Figure
	A/°C	V	A	A ² s	μs	°C/W	°C/W	V/A		
R22-10	10/100	100-1200	150	112	0,63-1,0 _(125°C)	1,7		2,30/31,4	1,2-1,5 Nm	1
R42-16	16/85	100-1200	500	1250	1,0-1,6 _(125°C)	0,8		3,15/100	2,0-2,5 Nm	2
R42-25	25/80	100-1200	500	1250	1,0-1,6 _(125°C)	0,8		2,30/100	2,0-2,5 Nm	2
R42-32	32/70	100-1200	500	1250	1,0-1,6 _(125°C)	0,8		1,95/100	2,0-2,5 Nm	2
R42-40	40/80	100-1200	500	1250	1,6-2,5 _(125°C)	0,55		1,95/125	2,0-2,5 Nm	2
R52-100	100/75	600-1400	2200	24000	1,0-2,0	0,25	0,12	1,90/314	14,0- 17,0 Nm	3,4
R61-150	150/75	1600-2400	3500	61000	2,0	0,17	0,10	2,00/800	28,0-32,0 Nm	5
R61-200	200/70	1600-2000	3500	61000	3,2					
R63-300	300/65	800-1200	3500	61000	1,0-2,0	0,095	0,02	1,85/800	4,5-6,5 kN	9
		1600-2400			2,0					
R63-400	400/55	800-1200	4500	100000	2,0					
R73-200	200/115	3400-4500	3200	51000	5,0	0,06	0,02	4,50/1500	9,0-11,0 kN	10
R73-470	470/95	2400-2600	6500	210000	4,0			1,90/1500		
R75-600	600/95	800-1200	7000	245000	2,0	0,04	0,02	1,80/1500	9,0-11,0 kN	11
		1400-1600			2,0-3,2					
R75-800	800/85	800-1200	9500	450000	2,0					
		1400-1600			3,2					
R83-400	400/100	3000-4000	6000	180000	5,0	0,037	0,02	3,5/1500	12,0-14,0 kN	10
R83-600	600/100	1600-2400	10000	500000	4,0					
R83-800	800/90	800-1600	12500	780000	2,0			1,7/1500		
R95-900	900/70	2200-3000	14000	980000	4,0	0,023	0,01	3,0/1500	22,5-25,0 kN	12
R95-1100		3200-3600			5,0					
R95-1500	1500/70	800-1200	22000	2400000	2,0			2,3/1500		
								1,7/1500		

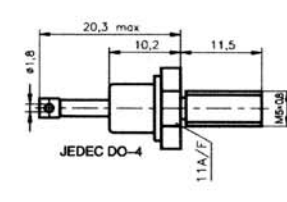


Fig. 1 D22, R22
Weight 7g

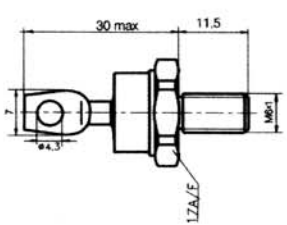


Fig. 2 D42, R42
Weight 18g

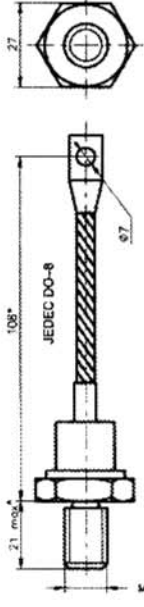


Fig. 3 D51, R51, D52, R52
Weight 125g

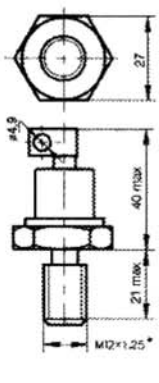


Fig. 4 D51, R51, D52, R52...-DA1
Weight 115g

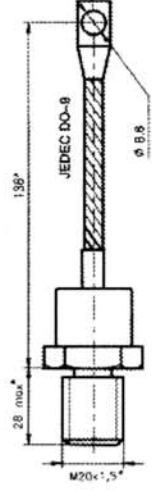


Fig. 5 D61, R61, D62, R62
Weight 250g

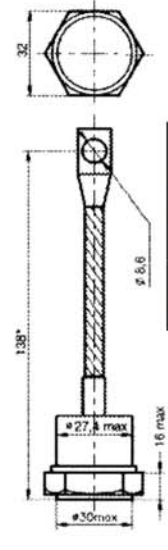


Fig. 6 D64, D66
Weight 200g

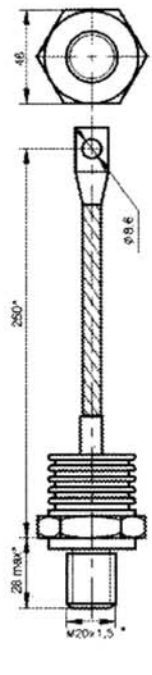


Fig. 7 D71
Weight 500g

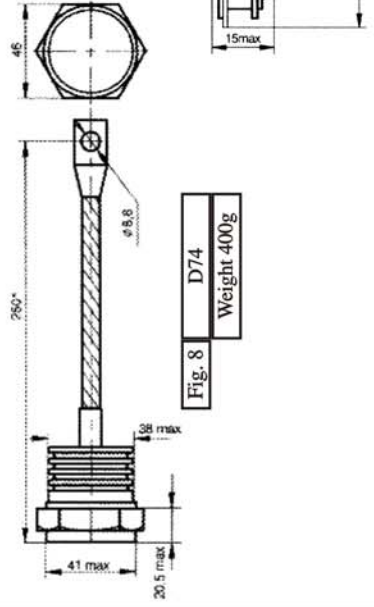


Fig. 8 D74
Weight 400g

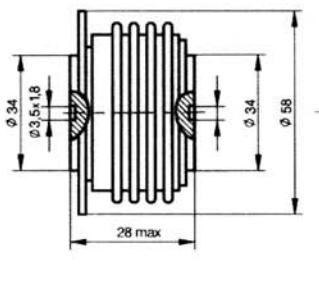


Fig. 10 D73, R73, D83, R83
Weight 280g

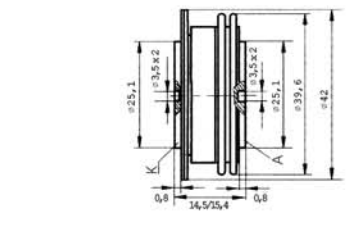


Fig. 11 D75, R75
Weight 85g

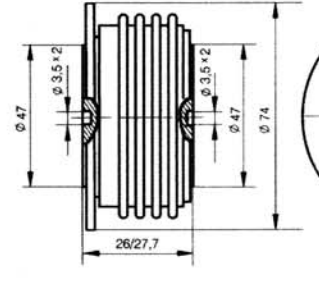


Fig. 12 D95, R95
Weight 480g

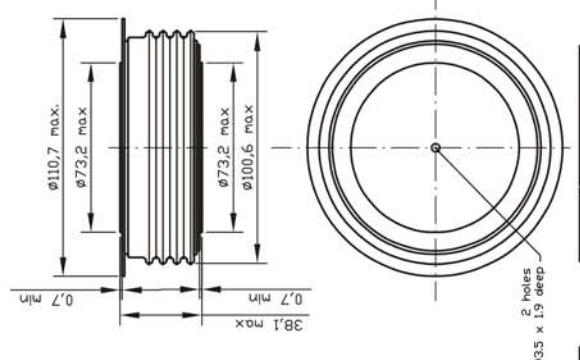


Fig. 13 DB3
Weight 1130g

* other dimensions can be agreed



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