



STANDARD DIODES SELECTOR GUIDE

TYPE	VRRM max T _j = T _j max (V)	IRRM typical = T _j max (mA)	IF (AV) at T _c		current code	IFSM (2) 1 pulse (kA)	I ₂ t (2) for fusing (kA ² s)	Junction temperature range (°C)	V ₀ T _j = T _j max (V)	r _t (mΩ)	Chip size (mm)	storage temp. (°C)	R _{thJC} (3) (°C/W)	Typical reverse recovery time @ T _j =25°C			Mounting force or torque	PACKAGE INFORMATION		contact/ flange/ height (mm)
			(A)	(°C)										IFM (A)	-dir/dt (A/μs)	t _{rr} (μs)		Style	Outline	
STUD DIODES																				
Up to 1600V																				
R510/R511--10	1200	30	100	130	10	2,3@8,3ms	22 @8,3ms	- 65 to 200	0,80	1,99	16	- 65 to 200	0,28	314	25	7	14 Nm	3/8"-24 Stud (1)(4)(6)	R51	-
R510/R511--15	1200	30	150	110	15	3@8,3ms	37,5@8,3ms	- 65 to 200	0,85	1,08	16	- 65 to 200	0,28	314	25	7	14 Nm	3/8"-24 Stud (1)(4)(6)	R51	-
R500/R501--10	1600	30	100	160	10	2,3@8,3ms	22 @8,3ms	- 65 to 200	0,8	1,99	16	- 65 to 200	0,28	314	25	7	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R500/R501--15	1600	30	150	145	15	3@8,3ms	37,5@8,3ms	- 65 to 200	0,85	1,08	16	- 65 to 200	0,28	314	25	7	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R500/R501--14 +	1400	25	140	125	14	2,5@10ms	32,2@10ms	- 65 to 190	0,95	1	16	- 65 to 200	0,30	314	25	6	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R500/R501--17 +	1400	25	170	125	17	3@10ms	45@10ms	- 65 to 190	0,85	0,64	16	- 65 to 200	0,30	314	25	6	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R600/R601--33 +	1200	50	330	125	33	6,5@10ms	211@10ms	- 55 to 190	0,80	0,63	23	- 55 to 200	0,13	785	25	9	41 Nm	3/4"-16 Stud(1)	R60	-
R700/R701--05	1600	50	550	125	5	10@8,3ms	416@8,3ms	- 65 to 175	0,65	0,25	33	- 65 to 200	0,12	1500	25	15	41 Nm	3/4"-16 Stud(1)	R70	-
R700/R701--50 +	1200	50	500	125	50	10@10ms	500@10ms	- 55 to 190	0,70	0,32	33	- 55 to 200	0,10	1100	25	9	35Nm	3/4"-16 Stud(1)	R70	-
Up to 2600V																				
R600/R601--20	2600	50	200	140	20	5,5@8,3ms	125@8,3ms	- 65 to 150	0,84	0,94	23	- 65 to 190	0,13	785	25	9	41 Nm	3/4"-16 Stud(1)	R60	-
R600/R601--25	2600	50	250	130	25	6@8,3ms	150@8,3ms	- 65 to 150	0,88	0,72	23	- 65 to 190	0,13	785	25	11	41 Nm	3/4"-16 Stud(1)	R60	-
R600/R601--30	2600	50	300	120	30	6,5@8,3ms	175@8,3ms	- 65 to 150	0,92	0,53	23	- 65 to 190	0,13	785	25	13	41 Nm	3/4"-16 Stud(1)	R60	-
R600/R601--23 +	2600	50	230	100	23	5@10ms	125@10ms	- 55 to 150	0,84	0,94	23	- 55 to 200	0,13	785	25	13	41 Nm	3/4"-16 Stud(1)	R60	-
R600/R601--30 +	2200	50	300	110	30	5,5@10ms	151@10ms	- 55 to 175	0,82	0,82	23	- 55 to 200	0,13	785	25	11	41 Nm	3/4"-16 Stud(1)	R60	-
R700/R701--04	2600	50	450	100	4	8,5@8,3ms	266@8,3ms	- 65 to 150	0,83	0,40	33	- 65 to 200	0,12	1500	25	11	41 Nm	3/4"-16 Stud(1)	R70	-
R700/R701--44 +	2200	50	440	110	44	9@10ms	405@10ms	- 55 to 175	0,80	0,42	33	- 55 to 200	0,10	1100	25	11	35Nm	3/4"-16 Stud(1)	R70	-
Up to 3600V																				
R700/R701--32 +	3000	50	315	100	32	8@10ms	320@10ms	- 55 to 150	0,90	0,52	33	- 55 to 200	0,10	1100	25	13	35Nm	3/4"-16 Stud(1)	R70	-
Up to 4500V																				
R700/R701--03	4400	50	300	80	3	7@8,3ms	204@8,3ms	- 65 to 150	0,92	0,55	33	- 65 to 200	0,12	1500	25	9	41 Nm	3/4"-16 Stud(1)	R70	-
R700/R701--25 +	4000	50	245	100	25	7@10ms	245@10ms	- 55 to 150	1,30	0,60	33	- 55 to 200	0,10	1100	25	15	35Nm	3/4"-16 Stud(1)	R70	-
PRESS PAK DIODES																				
Up to 800V																				
RAS00412XX°	400	100	12000	68	12	57,3@10ms Vr=0	16416@10ms Vr=0	- 40 to 175	0,978	0,005	67	- 50 to 200	0,008	400	25	25	40 to 48,9 kN	Press pak	RAS	63/100/26,2
RBS8--70	600	100	7000	79	70	55@10ms	15125@10ms	- 40 to 175	0,645	0,044	77	- 40 to 175	0,0095	1500	25	25	26,6 to 44,4 kN	Press pak	RBS	73/113/26
Up to 1600V																				
R620--48 +	1200	50	485	125	48	6,5@10ms	211@10ms	- 55 to 190	0,80	0,63	23	- 55 to 200	0,07	785	25	9	5,4kN	Press pak	R62	20/42/13,6
A390--	1600	25	400	117	-	7@8,3ms	204@8,3ms	- 40 to 200	1,40V 144°C	400A	23	- 40 to 200	0,095	-	-	-	3,2 to 4 kN	Press pak	R62	20/42/13,6
R720--12	1600	50	1200	95	12	12,5@8,3ms	650@8,3ms	- 65 to 175	0,68	0,24	33	- 65 to 200	0,055	1500	25	13	9 to 11 kN	Press pak	R72	35/60/26,4
A430-- +	1500	50	1375	55	-	10 @8,3ms	415 @8,3ms	- 40 to 200	0,62	0,254	30	- 40 to 200	0,06	1500	25	10	8 to 9,8 kN	Press pak	R72	35/60/26,4
R720--80 +	1200	50	810	125	80	10@10ms	500@10ms	- 55 to 190	0,70	0,32	33	- 55 to 200	0,05	1100	25	9	10 kN	Press pak	R72	35/60/26,4
R7S0--13	1600	150	1300	90	13	16,5@8,3ms Vr=0	1360@8,3ms Vr=0	- 40 to 175	0,749	0,196	33	- 50 to 200	0,035	1500	25	25	9 to 11 kN	Press pak	R7S	30/49/15,4
R7S0--16	1600	50	1600	98	16	12,8@10ms	819@10ms	- 65 to 200	0,63	0,293	30	- 65 to 200	0,035	1500	25	7	9 to 11 kN	Press pak	R7S	30/49/14,4
R7H0--16	1600	50	1600	98	16	12,8@10ms	819@10ms	- 65 to 200	0,63	0,293	30	- 65 to 200	0,035	1500	25	7	9 to 11 kN	Press pak	R7H	25/41/14,6
R9G0--22	1600	150	2200	134	22	27,4@10ms	3750@10ms	- 40 to 150	0,79	0,088	50	- 40 to 190	0,02	1500	25	15	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9G0--26 +	1400	50	2600	100	26	38@10ms	7220@10ms	- 55 to 190	0,58	0,120	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
RA20--48	1200	150	4800	98	48	44,6@10ms	9945@10ms	- 40 to 190	0,65	0,063	67	- 40 to 200	0,013	1500	25	16	41 to 50 kN	Press pak (5)	RA2	63/100/34

RBK8--63	1600	100	6300	100	63	115,9@10ms Vr=0	67200@10ms Vr=0	- 40 to 190	0,688	0,036	77	- 40 to 200	0,0115	400	25	25	26,6 to 44,4 kN	Press pak	RB2	73/113/36
RBS8--72	1600	100	7200	84	72	115,9@10ms Vr=0	67200@10ms Vr=0	- 40 to 190	0,704	0,0479	77	- 50 to 200	0,0095	2000	25	35	26,6 to 44,4 kN	Press pak	RBS	73/113/26
RB20--80 +	1600	100	8000	68	80	79@10ms Vr=0	31200@10ms Vr=0	- 40 to 190	0,70	0,035	77	- 40 to 190	0,011	-	-	-	27 to 40 kN	Press pak (5)	RB2	73/113/36
RDS8--10	1200	300	10000	90	10	111@10ms Vr=0	61600@10ms Vr=0	- 40 to 175	0,64	0,023	100	- 50 to 200	0,008	400	25	25	71,2 to 89 kN	Press pak	RDS	100/144/27

Up to 2600V

R620--30	2400	50	300	140	30	5,5@8,3ms	125@8,3ms	- 65 to 150	0,92	0,88	23	- 65 to 190	0,095	785	25	11	4,5 to 6,3 kN	Press pak	R62	20/42/13,6
R620--40	2400	50	400	130	40	6@8,3ms	150@8,3ms	- 65 to 150	0,89	0,74	23	- 65 to 190	0,095	785	25	11	4,5 to 6,3 kN	Press pak	R62	20/42/13,6
R620--50	2400	50	500	115	50	6,5@8,3ms	175@8,3ms	- 65 to 150	0,85	0,63	23	- 65 to 190	0,095	785	25	11	4,5 to 6,3 kN	Press pak	R62	20/42/13,6
R620--35 +	3000	50	345	100	35	5@10ms	125@10ms	- 55 to 150	0,84	0,94	23	- 55 to 200	0,07	785	25	13	5,4kN	Press pak	R62	20/42/13,6
R620--44 +	2200	50	440	110	44	5,5@10ms	151@10ms	- 55 to 175	0,82	0,82	23	- 55 to 200	0,07	785	25	11	5,4kN	Press pak	R62	20/42/13,6
R720--09	2600	50	900	85	9	8,5@8,3ms	301@8,3ms	- 65 to 150	0,84	0,42	33	- 65 to 200	0,055	1500	25	10	9 to 11 kN	Press pak	R72	35/60/26,4
R720--70 +	2200	50	710	110	70	9@10ms	405@10ms	- 55 to 175	0,80	0,42	33	- 55 to 200	0,05	1100	25	11	10 kN	Press pak	R72	35/60/26,4
R750--08	2400	50	800	121	8	7,75@10ms	300@10ms	- 65 to 175	0,91	0,518	33	- 65 to 200	0,035	1500	25	10	9 to 11 kN	Press pak	R7S	30/49/14,4
R750--12	2400	50	1200	86	12	9@10ms	337@10ms	- 65 to 175	0,831	0,441	33	- 65 to 200	0,035	1500	25	10	9 to 11 kN	Press pak	R7S	30/49/14,4
R750--15	2400	150	1500	98	15	14@8,3ms	817@8,3ms	- 40 to 200	0,694	0,345	33	- 55 to 200	-	1500	25	25	9 to 11 kN	Press pak	R7S	30/49/15,4
R820--16	2600	75	1600	82	16	12,95@10ms Vr=0	699@10ms Vr=0	- 40 to 175	0,68	0,247	38	- 50 to 190	0,035	400	25	25	13,3 to 15,5 kN	Press pak	R82	35/60/26,4
R9G0--21	2400	150	2100	124	21	26,5@10ms	3510@10ms	- 40 to 190	0,618	0,192	50	- 40 to 190	0,02	1500	25	25	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9G0--21	2200	75	2100	118	21	22@8,3ms	2002@8,3ms	- 40 to 175	0,912	0,089	50	- 50 to 200	0,02	1500	25	25	24,5 to 26,7	Press pak (5)	R9G	47/75/26,7
A451--	2200	50	2500	88	-	27,3@10ms	2725@10ms	- 40 to 175	0,66	0,128	50	- 40 to 200	0,025	-	-	-	22,2 to 24,5 kN	Press pak	R9G	47/75/26,7
R9G0--22 +	2400	50	2200	100	22	30@10ms	4500@10ms	- 55 to 190	0,61	0,200	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9G0--21 +	2600	50	2100	75	21	26,7@10ms	3560@10ms	- 55 to 175	0,68	0,220	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9S0--30	2600	75	3000	115	30	28,6@8,33ms Vr=0	3410@8,33ms Vr=0	- 50 to 200	0,91	0,089	50	- 40 to 175	0,015	1500	25	25	24,5 to 26,7kN	Press pak	R9S	47/75/16,5
RA20--36	2400	150	3600	100	36	36,5@10ms	6660@10ms	- 40 to 175	0,66	0,113	67	- 40 to 200	0,013	1500	25	22	41 to 50 kN	Press pak (5)	RA2	63/100/34
RAS8--54	2400	150	5450	90	54	115@10ms Vr=0	66125@10ms Vr=0	- 40 to 175	0,734	0,067	67	- 50 to 200	0,011	1500	25	25	40 to 48,9 kN	Press pak	RAS	63/100/26,2
RBK8--50	2400	150	5000	80	50	87,1@10ms Vr=0	38000@10ms Vr=0	- 40 to 175	0,680	0,080	77	- 50 to 200	0,0115	400	25	25	26,6 to 44,4 kN	Press pak	RB2	73/113/38,1
RBS8--56	2400	150	5680	78	56	98,5@10ms Vr=0	48600@10ms Vr=0	- 40 to 175	0,680	0,080	77	- 50 to 200	0,0095	400	25	25	26,6 to 44,4 kN	Press pak	RBS	73/113/27,4
RB20--38 +	2600	100	3800	124	38	63@10ms Vr=0	19800@10ms Vr=0	- 40 to 185	0,71	0,08	77	- 40 to 190	0,011	-	-	-	27 to 40 kN	Press pak (5)	RB2	73/113/36
RDS8--80	2500	300	8000	90	80	92,5@10ms Vr=0	4280@10ms Vr=0	- 40 to 175	0,654	0,0382	100	- 50 to 200	0,0075	400	25	25	71,2 to 89 kN	Press pak	RDS	100/144/27
R720--52 +	3000	50	520	100	52	8@10ms	320@10ms	- 55 to 150	0,90	0,52	33	- 55 to 200	0,05	1100	25	13	10 kN	Press pak	R72	35/60/26,4
R9G0--18	3200	150	1800	110	18	19,6@10ms	1920@10ms	- 40 to 175	0,814	0,224	50	- 40 to 190	0,02	1500	25	25	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9G0--17 +	3600	50	1700	60	17	20@10ms	2000@10ms	- 55 to 150	0,74	0,330	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9G0--18 +	3600	50	1800	80	18	21,5@10ms	2300@10ms	- 55 to 175	0,69	0,320	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
RBS8--45	3200	125	4500	94	45	62,4@10ms Vr=0	19500@10ms Vr=0	- 40 to 175	0,786	0,0997	77	- 50 to 200	0,0095	1500	25	25	26,6 to 44,4 kN	Press pak	RBS	73/113/26
RB20--35 +	3200	100	3500	115	35	57@10ms Vr=0	16200@10ms Vr=0	- 40 to 175	0,84	0,08	77	- 40 to 175	0,011	-	-	-	27 to 40 kN	Press pak (5)	RB2	73/113/36
RDk8--85	3000	300	8500	90	85	92,5@10ms Vr=0	42800@10ms Vr=0	- 40 to 160	0,762	0,053	100	- 50 to 190	0,0063	400	25	35	71,2 to 89 kN	Press pak	RD2	100/144/36

Up to 4500V

R720--06	4400	50	600	85	6	7@8,3ms	204@8,3ms	- 65 to 150	0,92	0,61	33	- 65 to 200	0,055	1500	25	7	9 to 11 kN	Press pak	R72	35/60/26,4
R9G0--10 +	4400	50	1000	90	10	13,4@10ms	900@10ms	- 55 to 150	0,91	0,620	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
R9G0--13 +	4000	50	1300	75	13	16@10ms	1280@10ms	- 55 to 150	0,83	0,470	50	- 55 to 200	0,018	-	-	-	22,7 to 27 kN	Press pak (5)	R9G	47/75/26,7
RA20--25	4200	150	2500	100	25	25,5@10ms	3250@10ms	- 40 to 150	0,74	0,132	67	- 40 to 200	0,013	1500	25	25	41 to 50 kN	Press pak (5)	RA2	63/100/34
RBS8--35	4200	150	3500	89	35	77,4@10ms Vr=0	29900@10ms Vr=0	- 40 to 150	0,77	0,125	77	- 50 to 200	0,0095	2000	25	25	26,6 to 44,4 kN	Press pak	RBS	73/113/26
RBS8--45	4500	150	4500	80	45	85@10ms Vr=0	36125@10ms Vr=0	- 40 to 175	0,75	0,133	77	- 50 to 200	0,0095	2000	25	30	26,6 to 44,4 kN	Press pak	RBS	73/113/26
RBK8--40	4500	150	4000	80	40	65,5@10ms Vr=0	17900@10ms Vr=0	- 40 to 175	0,75	0,133	77	- 50 to 200	0,0115	2000	25	30	26,6 to 44,4 kN	Press pak	RBK	73/113/38
RB20--30 +	4500	100	3000	100	30	36@10ms Vr=0	6500@10ms Vr=0	- 40 to 170	0,79	0,18	77	- 40 to 175	0,011	-	-	-	27 to 40 kN	Press pak (5)	RB2	73/113/36

Up to 6500V

R820--06	6500	100	600	100	06	6,87@10ms Vr=0	236@10ms Vr=0	- 40 to 150	0,78	1,27	38	- 50 to 190	0,035	400	25	30	13,3 to 15,5 kN	Press pak	R82	35/60/26,4
R9G0--14	6500	150	1360	80	14	15,25@10ms Vr=0	1116@10ms Vr=0	- 40 to 150	0,793	0,521	50	- 50 to 200	0,02	1500	25	25	22,7 to 27 kN	Press pak	R9G	47/75/27,4
R9G0--12	5400	150	1200	102	12	14,6@10ms	1066@10ms	- 40 to 150	1,07	0,323	50	- 40 to 190	0,02	1500	25	25	22,7 to 27 kN	Press pak	R9G	47/75/26,7
RA20--20	5400	150	2000	99	20	21,8@10ms	2376@10ms	- 40 to 150	0,96	0,207	67	- 40 to 200	0,013	1500	25	25	41 to 50 kN	Press pak (5)	RA2	63/100/34
RBK8--25	6500	150	2500	85	25	61@10ms Vr=0	18600@10ms Vr=0	- 40 to 150	0,79	0,238	77	- 50 to 200	0,0115	2000	25	25	26,6 to 44,4 kN	Press pak	RBK	73/113/38
RBS8--28	6500	150	2850	85	28	61@10ms Vr=0	18600@10ms Vr=0	- 40 to 150	0,79	0,238	77	- 50 to 200	0,0095	2000	25	25	26,6 to 44,4 kN	Press pak	RBS	73/113/27
RDk8--40 °	6000	300	4000	68	40	55,5@10ms Vr=0	12800@10ms Vr=0	- 40 to 150	1,130	0,117	100	- 50 to 190	0,0075	400	25	25	71,2 to 89 kN	Press pak	RD2	100/144/36

ORDERING INFORMATION

Select the complete part number you desire from the following table

Type	Standard Rectifier	Voltage (V)		Current (A) IF(AV) code	Recovery time trr (µs)	Leads code only for stud
		VRRM	Code			
R51	0/1	200	02	select the current code in IFAV column	00	See our standard codes on drawings
R50	0/1	400	04			
R61	0/1	"	"		Not specified	
R60	0/1	1000	10			
R62	0	"	"		Other leads are available on request	
R70	0/1	2500	25			
R72	0	"	"			
R7S	0	4500	45			
R7H	0	"	"			
R82	0	5400	54			
R9G	0					
RA2	0					
RB2	0					
RBS	8					
RBK	8					
RDK	8					
RDS	8					

0 : Standard Diode (for stud standard polarity : cathode to base)

1 : Standard Diode (for stud reverse polarity : anode to base)

8 : Standard Diode (Press pak only)

Type	Voltage (V)	
	VRRM	Code
A430	600	M
A451	800	N
	1000	P
	1200	PB
	1400	PD
	1600	PM
	1800	PN
	2000	L
	2200	LB
	2400	LD

Examples :

R500 12 10 00 WA

R50 : Case thread 3/8"

0 : Standard diode (cathode to base)

12 : VRRM = 1200 V

10 : IF(AV) = 100 A

00 : trr not specified

WA : lead length 113 mm

A451LB

A451 : R9G case press pak

LB : VRRM=2200V

Notes

(1) = Available with metric thread on request

(2) = 100% reapplied voltage unless otherwise specified

(3) = DC Value

(4) = Available in 1/2" --> R5C

(5) = Available with flat package : R9A, RAA or RBT

(6) = Glass metal seals

+ Old version diode

* preliminary data sheet

All values shown in this document are subject to change for product improvement. The information, diagrams and all other data included herein are believed to be correct and reliable.