



FAST RECOVERY DIODES SELECTOR GUIDE

TYPE	IF (AV) at Tc			IFSM (2) 1 pulse (kA)	Izt for fusing (kA2s)	Junction temperature range (°C)	VRRM (5) max Tj = Tj max (V)	IRRM typical Tj = Tj max (mA)	Vo Tj = Tj max (V)	rt (mΩ)	Chip size (mm)	storage temp. (°C)	RthJC (3) (°C/W)	Typical reverse recovery time (5) @ Tj=25°C			PACKAGE INFORMATION			
	(A)	(°C)	current code											IFM (A)	-dir/dt (A/μs)	ttr (μs)	Mounting force or torque	Style	Outline	contact/ flange/ height (mm)
R502/R503--10RS	100	90	10	2.2@8.3ms	20@8.3ms	- 40 to 150	1200	45	4.5V 25°C 450A		16	- 40 to 200	0.28	314	25	0.3	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R502/R503--13LS	125	90	13	2.5@8.3ms	26@8.3ms	- 40 to 150	1400	45	1.17	3.09	16	- 40 to 190	0.28	314	25	0.7	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R502/R503--18FS	175	90	18	3.5@8.3ms	51@8.3ms	- 40 to 150	1400	45	0.85	1.57	16	- 40 to 190	0.28	314	25	1.5	14 Nm	3/8"-24 Stud (1)(4)	R50	-
R502/R503--11EJ/CJ +	115	110	11	2.2@10ms	24.2@10ms	- 55 to 175	1200	50	1.24	1.32	16	- 55 to 200	0.3	314	25	2-3	15 Nm	3/8"-24 Stud (1)(4)	R50	-
R502/R503--13CJ +	125	110	13	2.5@10ms	31.2@10ms	- 55 to 175	1200	50	1.11	1.32	16	- 55 to 200	0.3	314	25	3	15 Nm	3/8"-24 Stud (1)(4)	R50	-
R602/R603--22PS	220	150	22	3.5@8.3ms	51@8.3ms	- 40 to 150	1600	50	2.75V 25°C 800A		23	- 40 to 190	0.17	785	25	0.5	41 Nm	3/4"-16 Stud(1)	R60	-
R602/R603--25HS	250	150	25	4.5@8.3ms	85@8.3ms	- 40 to 150	1600	50	1.20	0.86	23	- 40 to 190	0.17	785	25	1	41 Nm	3/4"-16 Stud(1)	R60	-
R602/R603--35ES	350	90	35	6@8.3ms	150@8.3ms	- 40 to 150	1600	50	0.95	0.51	23	- 40 to 190	0.17	785	25	2	41 Nm	3/4"-16 Stud(1)	R60	-
R602/R602--22CJ/AJ +	220	100	22	4.5@10ms	101@10ms	- 55 to 150	2200	50	1.10	0.87	23	- 55 to 200	0.13	785	25	3-5	27.5 Nm	3/4"-16 Stud(1)	R60	-
R602/R602--24AJ +	240	100	24	5@10ms	125@10ms	- 55 to 150	2200	50	0.90	0.87	23	- 55 to 200	0.13	785	25	5	27.5 Nm	3/4"-16 Stud(1)	R60	-
R602/R602--26EJ/CJ +	260	110	26	4.5@10ms	101@10ms	- 55 to 175	1200	50	1.10	0.87	23	- 55 to 200	0.13	785	25	2-3	27.5 Nm	3/4"-16 Stud(1)	R60	-
R602/R602--28CJ/AJ +	280	110	28	5@10ms	125@10ms	- 55 to 175	1600	50	0.90	0.87	23	- 55 to 200	0.13	785	25	3-5	27.5 Nm	3/4"-16 Stud(1)	R60	-
R602/R602--30AJ +	300	110	30	5.5@10ms	151@10ms	- 55 to 175	1600	50	0.8	0.87	23	- 55 to 200	0.13	785	25	5	27.5 Nm	3/4"-16 Stud(1)	R60	-
R622--30PS	300	90	30	3.5@8.3ms	51@8.3ms	- 40 to 150	1600	50	2.75V 25°C 800A		23	- 40 to 190	0.095	785	25	0.5	4,5 to 6,3 kN	Press pak	R62	20/42/13,6
R622--40HS	400	90	40	4.5@8.3ms	85@8.3ms	- 40 to 150	1600	50	1.23	0.84	23	- 40 to 190	0.095	785	25	1	4,5 to 6,3 kN	Press pak	R62	20/42/13,6
R622--55ES	550	90	55	6@8.3ms	150@8.3ms	- 40 to 150	1600	50	0.97	0.44	23	- 40 to 190	0.095	785	25	2	4,5 to 6,3 kN	Press pak	R62	20/42/13,6
R622--29CJ/AJ +	290	100	29	4.5@10ms	101@10ms	- 55 to 150	2200	50	1.10	0.87	23	- 55 to 200	0.07	785	25	3-5	5,4 kN	Press pak	R62	20/42/13,6
R622--32AJ +	320	100	32	5@10ms	125@10ms	- 55 to 150	2200	50	0.90	0.87	23	- 55 to 200	0.07	785	25	5	5,4 kN	Press pak	R62	20/42/13,6
R622--39EJ/CJ +	390	110	39	4.5@10ms	101@10ms	- 55 to 175	1200	50	1.10	0.87	23	- 55 to 200	0.07	785	25	2-3	5,4 kN	Press pak	R62	20/42/13,6
R622--42CJ/AJ +	415	110	42	5@10ms	125@10ms	- 55 to 175	1600	50	0.90	0.87	23	- 55 to 200	0.07	785	25	3-5	5,4 kN	Press pak	R62	20/42/13,6
R622--44AJ +	435	110	44	5.5@10ms	151@10ms	- 55 to 175	1600	50	0.8	0.87	23	- 55 to 200	0.07	785	25	5	5,4 kN	Press pak	R62	20/42/13,6
R702/R703--26CJ/AJ +	265	100	26	6.5@10ms	211@10ms	- 55 to 150	2200	50	1.15	0.6	33	- 55 to 200	0.1	1100	25	3-5	35 Nm	3/4"-16 Stud(1)	R70	-
R702/R703--28AJ +	280	100	28	7@10ms	245@10ms	- 55 to 150	2200	50	1.05	0.6	33	- 55 to 200	0.1	1100	25	5	35 Nm	3/4"-16 Stud(1)	R70	-
R702/R703--36CJ/AJ +	360	110	36	7.5@10ms	281@10ms	- 55 to 175	1200	50	0.95	0.6	33	- 55 to 200	0.1	1100	25	3-5	35 Nm	3/4"-16 Stud(1)	R70	-
R702/R703--40AJ +	400	110	40	8.5@10ms	361@10ms	- 55 to 175	1200	50	0.75	0.6	33	- 55 to 200	0.1	1100	25	5	35 Nm	3/4"-16 Stud(1)	R70	-
R722--05CS	500	90	05	6.5@8.3ms	176@8.3ms	- 40 to 150	2600	50	2.25V 25°C 1500A		33	- 40 to 190	0.055	1500	25	3	9 to 11 kN	Press pak	R72	35/60/26,4
R722--06ES	650	90	06	7.5@8.3ms	234@8.3ms	- 40 to 150	1600	50	1.12	1.67	33	- 40 to 190	0.055	1500	25	2	9 to 11 kN	Press pak	R72	35/60/26,4
R722--07AS	700	90	07	9.5@8.3ms	376@8.3ms	- 40 to 150	2600	50	1.65V 25°C 1500A		33	- 40 to 190	0.055	1500	25	5	9 to 11 kN	Press pak	R72	35/60/26,4
R722--08ES	800	90	08	11@8.3ms	504@8.3ms	- 40 to 150	1600	50	1.08	0.36	33	- 40 to 190	0.055	1500	25	2	9 to 11 kN	Press pak	R72	35/60/26,4
R722--45CJ/AJ +	450	100	45	6.5@10ms	211@10ms	- 55 to 150	2200	50	1.15	0.6	33	- 55 to 200	0.05	1100	25	3-5	10 kN	Press pak	R72	35/60/26,4
R722--47AJ +	470	100	47	7@10ms	245@10ms	- 55 to 150	2200	50	1.05	0.6	33	- 55 to 200	0.05	1100	25	5	10 kN	Press pak	R72	35/60/26,4
R722--60CJ/AJ +	600	110	60	7.5@10ms	281@10ms	- 55 to 175	1200	50	0.95	0.6	33	- 55 to 200	0.05	1100	25	3-5	10 kN	Press pak	R72	35/60/26,4
R722--65AJ +	650	110	65	8.5@10ms	361@10ms	- 55 to 175	1200	50	0.75	0.6	33	- 55 to 200	0.05	1100	25	5	10 kN	Press pak	R72	35/60/26,4
R7S2--07ES	700	90	07	6.5@8.3ms	176@8.3ms	- 40 to 150	2600	50	2.25V 25°C 1500A		33	- 40 to 190	0.035	1500	25	2	9 to 11 kN	Press pak	R7S	30/49/14,4
R7S2--08AS	800	90	08	9.5@8.3ms	376@8.3ms	- 40 to 150	2600	50	1.65V 25°C 1500A		33	- 40 to 190	0.035	1500	25	5	9 to 11 kN	Press pak	R7S	30/49/14,4
R7S2--09ES	900	90	09	7.5@8.3ms	234@8.3ms	- 40 to 150	1600	50	1.32	0.44	33	- 40 to 190	0.035	1500	25	2	9 to 11 kN	Press pak	R7S	30/49/14,4
R7S2--10ES	1000	90	10	11@8.3ms	504@8.3ms	- 40 to 150	1400	50	1.05	0.37	33	- 40 to 190	0.035	1500	25	2	9 to 11 kN	Press pak	R7S	30/49/14,4
R7S2--07AJ +	700	80	07	8@8.3ms	267@8.3ms	- 40 to 150	2200	50	2.60V 25°C 1500A		33	- 40 to 190	0.035	1500	25	5	9 to 11 kN	Press pak	R7S	30/49/14,4
R7S2--08CJ/AJ +	800	120	08	9.5@8.3ms	375@8.3ms	- 40 to 175	1600	50	1.80V 25°C 1500A		33	- 40 to 190	0.035	1500	25	3-5	9 to 11 kN	Press pak	R7S	30/49/14,4
R7S2--11EJ/CJ +	1100	100	11	11@8.3ms	504@8.3ms	- 40 to 175	1600	50	1.65V 25°C 1500A		33	- 40 to 190	0.035	1500	25	2-3	9 to 11 kN	Press pak	R7S	30/49/14,4
R9G2--12BS	1200	90	12	14@8.3ms	820@8.3ms	- 40 to 150	3600	75	1.18	0.62	50	- 40 to 190	0.018	1500	25	4	22,7 to 27 kN	Press pak	R9G	47/75/26,7
R9G2--15AS	1500	90	15	18@8.3ms	1350@8.3ms	- 40 to 150	3600	75	1.04	0.39	50	- 40 to 190	0.018	1500	25	5	22,7 to 27 kN	Press pak	R9G	47/75/26,7
R9G2--09CJ +	900	80	09	12@8.3ms	597@10ms	- 40 to 150	3200	50	4.80V 25°C 3000A		50	- 40 to 190	0.023	1500	25	5	22,7 to 27 kN	Press pak	R9G	47/75/26,7
R9G2--11AJ +	1100	80	11	15@8.3ms	934@10ms	- 40 to 150	2000	75	3.10V 25°C 3000A		50	- 40 to 190	0.023	1500	25	5	22,7 to 27 kN	Press pak	R9G	47/75/26,7
R9G2--14CJ/AJ +	1400	80	14	25@8.3ms	2590@10ms	- 40 to 150	1200	100	2.50V 25°C 3000A		50	- 40 to 190	0.023	1500	25	3-5	22,7 to 27 kN	Press pak	R9G	47/75/26,7

ORDERING INFORMATION

Select the complete part number you desire from the following table

Type	Fast Rectifier	Voltage (V)		Current (A) IF(AV) code	trr (µs)	Recovery time		Leads code only for stud
		VRRM	Code			Old code	New code	
R50	2/3	200	02	select the current code in IFAV column	10		ZS	See our standard codes on drawings
R50	S/R	400	04		8		YS	
R60	2/3/S/F/R/E	"	"		6		WS	
R62	2/S/F	1000	10		5.5		IS	
R70	2/3	"	"		5	AJ	AS	Other leads are available on request
R72	S/F	2500	25		4.5		OS	
R7S	2/S/F	"	"		4		BS	
R82	S/F	4500	45		3.5		TS	
R9G	2/S/F				3	CJ	CS	
RA2	F				2.75		US	
					2.5		DS	
					2.25		VS	
					2	EJ	ES	
					1.5	FJ	FS	
					1.25		GS	
					1		HS	
					0.9		JS	
				0.8		KS		
				0.7		LS		
				0.6		MS		
				0.5		PS		
				0.4		QS		
				0.3		RS		
				0.2		NS		
				0.1		SS		

Examples :

R502 12 10 CS WA

R50 : Case thread 3/8"
 2 : Fast recovery diode standard polarity
 12 : VRRM = 1200 V
 10 : IF(AV) = 100 A
 CS : trr ≤ 3 µs
 WA : lead length 113 mm

R9GS 45 08 AS

R9G : Case R9G
 S : GTO Snubber Diode
 45 : VRRM = 4500 V
 08 : IF(AV) = 800 A
 AS : trr ≤ 5 µs

Notes

- (1) = Available with metric thread on request
- (2) = 100% reapplied voltage
- (3) = DC Value
- (4) = Available in 1/2" --> R5C or 3/8" --> R50
- (5) = Maximum voltage not always available for trr mini
- (6) = Available in flat package: R9A / RAA
- + Old version diode

- 2 : Fast Recovery Diode (for stud standard polarity : cathode to base)
- 3 : Fast Recovery Diode (for stud reverse polarity : anode to base)
- S : GTO Snubber Diode (for stud standard polarity : cathode to base)
- R : GTO Snubber Diode (for stud reverse polarity : anode to base)
- F : GTO Free Wheel Diode (for stud standard polarity : cathode to base)
- E : GTO Free Wheel Diode (for stud reverse polarity : anode to base)

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.