Overcurrent Protection PTC Thermistor
(Resettable Fuse)

Selection Guide

Confirm that:

① What is the supply voltage of the circuit?

② What is the normal operating current flowing through the PTC

③ What is the fault current under abnormal conditions?

Selection Criteria

Supply Voltage ≤ Maximum Voltage Rating

Normal Current ≤ Hold Current (Ihold)

Fault Current ≥ Trip Current (Itrip)

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Category	Part Number	Resistance (Ω)	Size Inch(mm)	Operating Temperature Range	Circuit Supply Voltage: Maximum Voltage	Maximum Current	Current through the PTC thermistor: Hold Current (Ihold) & Trip Current (Itrip)											
				(℃)	(V)	(mA)	(mA)	-40℃	-20℃	-10℃	0℃	10℃	25℃	50℃	60℃	75℃	85℃	95℃	105℃
Consumer	PRG15BC2R2MM1RC	2.2±20%	0402(1005)	-20-85	6	3,500	Hold Current		190	178	165	152	134	101	88	68	56		
							Trip Current		335	318	300	281	252	203	183	153	133		
Consumer	PRG18BC1R0MM1RB	1.0±20%	0603(1608)	-20-85	6	7,500	Hold Current		460	430	401	372	330	251	220	160	120		
							Trip Current		880	850	819	788	740	619	570	474	410		
Consumer	PRG21BC0R6MM1RA	0.6±20%	0805(2012)	-20-85	6	10,000	Hold Current		615	575	530	486	420	323	285	222	180		
							Trip Current		1160	1100	1049	998	920	763	700	592	520		
Consumer	PRG21BC0R2MM1RA	0.2±20%	0805(2012)	-20-85	6	10,000	Hold Current		1080	1020	942	865	750	571	500	389	315		
							Trip Current		2100	2000	1892	1783	1620	1299	1170	978	850		
Consumer	PRG15BC4R7MM1RC	4.7±20%	0402(1005)	-20-85	9	2,500	Hold Current		130	121	112	103	91	68	60	46	38		
							Trip Current		229	216	204	191	172	139	125	105	91		
Consumer	PRG15BC3R3MM1RC	3.3±20%	0402(1005)	-20-85	9	3,500	Hold Current		155	145	135	125	110	82	71	55	45		
							Trip Current		273	260	245	229	205	166	150	126	109		
Consumer	PRG18BC2R2MM1RB	2.2±20%	0603(1608)	-20-85	12	6,500	Hold Current		325	300	277	254	220	170	150	108	80		
							Trip Current		625	600	572	543	500	415	380	314	270		
Consumer	PRG21BC1R0MM1RA	1.0±20%	0805(2012)	-20-85	12	10,000	Hold Current		460	430	401	372	330	251	220	170	138		
							Trip Current		880	850	819	788	740	619	570	486	430		
Consumer	PRG21BC0R4MM1RK	0.4±20%	0805(2012)	-20-85	12	37,000	Hold Current		680	630	587	544	480	372	330	258	210		
							Trip Current		1420	1350	1273	1196	1080	880	800	674	590		
Consumer	PRG21BC0R6MM1RK	0.6±20%	0805(2012)	-20-85	13.2	27,000	Hold Current		615	575	530	486	420	323	285	222	180		
							Trip Current		1160	1100	1049	998	920	763	700	592	520		
Consumer	PRG21BC0R8MM1RK	0.8±20%	0805(2012)	-20-85	14	21,000	Hold Current		450	425	400	376	340	261	230	182	150		
							Trip Current		990	940	889	838	760	646	600	516	460		
Consumer	PRG03BC101RB7RL	100±20Ω	0201(0603)	-20-75	15	143	Hold Current		26	24.5	23	21.5	19	14.3	12	6			
							Trip Current		57	54.4	51.8	49.2	45	36.6	33	27			
Consumer	PRG21AR220MB1RK	22±20%	0805(2012)	-10-60	16	900	Hold Current			89	85	81	75	64	60				
							Trip Current			225	217	208	195	169	157				
Consumer	PRG18BC3R3MM1RB	3.3±20%	0603(1608)	-20-85	16	6,000	Hold Current		260	240	222	205	180	137	120	87	65		
							Trip Current		500	480	458	435	400	329	300	252	220		
Consumer	PRG21BC2R2MM1RA	2.2±20%	0805(2012)	-20-85	16	9,000	Hold Current		325	300	277	254	220	170	150	117	95		
							Trip Current		620	600	572	543	500	415	380	326	290		
Consumer	PRG21BC1R0MM1RK	1.0±20%	0805(2012)	-20-85	16	20,000	Hold Current		460	430	401	372	330	251	220	170	138		
							Trip Current		880	850	819	788	740	619	570	486	430		
Consumer	PRG21BC1R5MM1RK	1.5±20%	0805(2012)	-20-85	18	15,000	Hold Current		350	330	307	284	250	192	170	134	110		
							Trip Current		740	700	660	620	560	460	420	360	320		
Consumer	PRG03BC181RB7RL	180±40Ω	0201(0603)	-20-75	20	188	Hold Current		18	17.2	16.4	15.5	14	10	8	4			
							Trip Current		46	43.8	41.6	39.4	36	29.7	27	22			
Consumer	PRG21BB220MB1RK	22±20%	0805(2012)	-10-60	20	1,100	Hold Current			55	52	49	44	34	30				
							Trip Current			110	105	100	91	74	66				
Consumer	PRG21AR420MB1RA	42±20%	0805(2012)	-10-60	20	590	Hold Current			64	61	59	54	44	40				
							Trip Current			120	115	109	100	87	81				
Consumer	PRG21BB150MB1RK	15±20%	0805(2012)	-10-60	20	1,600	Hold Current			74	70	65	59	45	40				
							Trip Current			140	134	127	116	94	85				
Consumer	PRG18BC6R8MM1RB	6.8±20%	0603(1608)	-20-85	20	3,500	Hold Current		180	165	152	139	120	91	80	59	45		
							Trip Current		335	320	303	286	260	207	185	152	130		
Consumer	PRG18BC4R7MM1RB	4.7±20%	0603(1608)	-20-85	20	5,000	Hold Current		210	200	187	174	155	115	100	71	52		
							Trip Current		420	400	380	360	330	273	250	208	180		
Consumer	PRG21BC3R3MM1RA	3.3±20%	0805(2012)	-20-85	20	7,500	Hold Current		260	240	222	205	180	137	120	93	75		
							Trip Current		500	480	458	435	400	329	300	258	230		
Consumer	PRG18BB471MB1RB	470±20%	0603(1608)	-20-75	24	60	Hold Current		13	12.3	11.7	11	10	8	7	5			
							Trip Current		26	25	24	22.8	21	17.4	16	13			
Consumer	PRG18BB221MB1RB	220±20%	0603(1608)	-20-75	24	130	Hold Current		18	17.2	16.3	15.5	14	11.1	10	8			
							Trip Current		36	35	33	31.5	29	24	22	18			
Consumer	PRG18BB101MB1RB	100±20%	0603(1608)	-20-75	24	300	Hold Current		27	25.8	24.4	23.2	21	17	15	12			
							Trip Current		56	55	52	49	45	37.5	34	28			
Consumer	PRG18BB470MB1RB	47±20%	0603(1608)	-20-75	24	630	Hold Current		38	36	34	32	29	22.8	20	14			
							Trip Current		78	75	71	67	61	50	45	35			
Consumer	PRG18BB330MB1RB	33±20%	0603(1608)	-20-75	24	900	Hold Current		46	44	41.5	39.5	36	28.3	25	18			
							Trip Current		90	85	81	77	71	58	52	41			
Consumer	PRG15BC220MM1RC	22±20%	0402(1005)	-20-85	24	1,400	Hold Current		60	57	53	49	43	32	28	21	17		
							Trip Current		119	113	107	100	90	74	67	56	48		
Consumer	PRG15BC180MM1RC	18±20%	0402(1005)	-20-85	24	1,700	Hold Current		67	62	58	53	47	35	31	23	19		
							Trip Current		132	125	117	109	98	79	71	59	52		
Consumer	PRG21BC2R2MM1RK	2.2±20%	0805(2012)	-20-85	27	15,000	Hold Current		325	300	277	254	220	170	150	117	95		
							Trip Current		620	600	572	543	500	415	380	326	290		
Consumer	PRG15BC680MM1RC	68±20%	0402(1005)	-20-85	30	600	Hold Current		37	35	32.5	30	26	19.5	17	13	10		
							Trip Current		69	65	62	58	52	42	37	31	27		
Consumer	PRG15BC470MM1RC	47±20%	0402(1005)	-20-85	30	800	Hold Current		45	42.5	39.5	36.5	32	23.5	20	15	12		
							Trip Current		82	78	73	69	62	50	45	38	33		
Consumer	PRG15BC330MM1RC	33±20%	0402(1005)	-20-85	30	1,200	Hold Current		54	50	47	43	38	29	25	19	15		
							Trip Current		97	92	86	81	73	59	54	45	39		
Consumer	PRG18BC220MM1RB	22±20%	0603(1608)	-20-85	30	1,800	Hold Current		75	70	66	61	54	42	37	28	22		
							Trip Current		155	145	136	127	113	91	82	69	60		
Consumer	PRG18BC150MM1RB	15±20%	0603(1608)	-20-85	30	2,500	Hold Current		90	84	78	72	64	51	45	34	27		
							Trip Current		190	180	168	155	135	108	96	80	68		
Consumer	PRG18BC100MM1RB	10±20%	0603(1608)	-20-85	30	3,800	Hold Current		110	103	97	90	80	62	55	42	33		
							Trip Current		235	220	205	189	165	130	116	95	80		
Consumer	PRG21BC6R8MM1RA	6.8±20%	0805(2012)	-20-85	30	5,500	Hold Current		180	165	152	139	120	91	80	62	50		
							Trip Current		335	320	303	286	260	207	185	155	135		
Consumer	PRG21BC4R7MM1RA	4.7±20%	0805(2012)	-20-85	30	8,000	Hold Current		210	200	187	174	155	115	100	76	60		
							Trip Current		420	400	380	360	330	273	250	214	190		
Consumer	PRG21BC3R3MM1RK	3.3±20%	0805(2012)	-20-85	30	11,000	Hold Current		260	240	222	205	180	137	120	93	75		
							Trip Current		500	480	458	435	400	329	300	258	230		
Consumer	PRG21BC6R8MM1RK	6.8±20%	0805(2012)	-20-85	32	5,800	Hold Current		180	165	152	139	120	91	80	62	50		
							Trip Current		335	320	303	286	260	207	185	155	135		
Consumer	PRG21BC4R7MM1RK	4.7±20%	0805(2012)	-20-85	32	8,500	Hold Current		210	200	187	174	155	115	100	76	60		
							Trip Current		420	400	380	360	330	273	250	214	190		
Automotive	PRG18BB471MS1RB	470±20%	0603(1608)	-20-75	16	40	Hold Current	14.0	13	12.3	11.7	11	10	8	7	5			
							Trip Current	28	26	25	24	22.8	21	17.4	16	13			
Automotive	PRG18BB221MS1RB	220±20%	0603(1608)	-20-75	16	90	Hold Current	19.0	18	17.2	16.3	15.5	14	11.1	10	8			
							Trip Current	39	36	35	33	31.5	29	24	22	18			
Automotive	PRG18BB101MS1RB	100±20%	0603(1608)	-20-75	16	200	Hold Current	29.0	27	25.8	24.4	23.2	21	17	15	12			
							Trip Current	61	56	55	52	49	45	37.5	34	28			
Automotive	PRG18BB470MS1RB	47±20%	0603(1608)	-20-75	16	420	Hold Current	41.0	38	36	34	32	29	22.8	20	14			
							Trip Current	84	78	75	71	67	61	50	45	35			
Automotive	PRG18BB330MS1RB	33±20%	0603(1608)	-20-75	16	600	Hold Current	50.0	46	44	41.5	39.5	36	28.3	25	18			
							Trip Current	97	90	85	81	77	71	58	52	41			
Automotive	PRG21AR220MS1RK	22±20%	0805(2012)	-40-105	16	900	Hold Current	99.0	92	89	85	81	75	64	60	51	45	34	25
							Trip Current	250	233	225	217	208	195	169	157	137	123	105	87
Automotive	PRG21AR8R2MS5RA	8.2±20%	0805(2012)	-40-105	16	2,440	Hold Current	190.0	170	161	152	143	130	108	100	82	70	57	45
							Trip Current	345	315	300	284	269	245	210	195	171	155	135	115
Automotive	PRG21AR4R7MS5RA	4.7±20%	0805(2012)	-40-105	16	4,260	Hold Current	290.0	265	251	238	225	205	165	150	126	110	92	75
							Trip Current	525	490	468	446	424	390	330	305	265	237	208	179
Automotive	PRG21BC2R2MS5RA	2.2±20%	0805(2012)	-40-85	16	9,000	Hold Current	350.0	308	285	262	240	206	150	128	96	76		
							Trip Current	670	620	600	572	543	500	415	380	326	290		
Automotive	PRG21AR420MS1RA	42±20%	0805(2012)	-40-105	20	590	Hold Current	71.0	66	64	61	59	54	44	40	31	25	20	15
							Trip Current	130	123	120	115	109	100	87	81	71	63	53	42
Automotive	PRG21BC3R3MS5RA	3.3±20%	0805(2012)	-40-85	20	7,500	Hold Current	270.0	247	229	211	194	168	120	102	76	60		
							Trip Current	540	500	480	458	435	400	329	300	258	230		
Automotive	PRG21AR220MS5RA	22±20%	0805(2012)	-40-105	30	1,710	Hold Current	115.0	105	99	93	88	80	66	60	51	45	36	28
							Trip Current	205	190	182	173	164	150	129	120	105	95	83	70
Automotive	PRG21AR150MS5RA	15±20%	0805(2012)	-40-105	30	2,500	Hold Current	140.0	125	118	111	105	95	78	72	61	55	44	33
							Trip Current	250	230	219	208	197	180	155	145	127	115	100	85
Automotive	PRG21AR100MS5RA	10±20%	0805(2012)	-40-105	30	3,750	Hold Current	175.0	155	146	137	128	115	95	87	73	65	52	40
							Trip Current	315	285	272	259	245	225	190	175	154	140	123	105
Automotive	PRG21BC6R8MS5RA	6.8±20%	0805(2012)	-40-85	30	5,500	Hold Current	200.0	171	157	144	131	112	80	68	51	40		
							Trip Current	365	335	320	303	286	260	207	185	155	135		
Automotive	PRG21BC4R7MS5RA	4.7±20%	0805(2012)	-40-85	30	8,000	Hold Current	225.0	200	187	175	163	145	102	85	62	48		
							Trip Current	460	420	400	380	360	330	273	250	214	190		