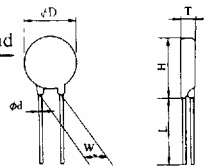




# METAL OXIDE VARISTORS TNR®

## G-SERIES (Disk Type, Radial Lead)



unit: mm

Model Number	φD	H Max	T Max	L Min	φd	W ± 1
TNR7G180K	7 ± 1	11	5	25	0.5	5
TNR7G271K			7			
TNR7G331K			7			
TNR7G471K	9 ± 1	13	5	25	0.5	5
TNR9G150K			7			
TNR9G271K			7			
TNR9G331K	13.5	16.5	5	25	0.8	7.5
TNR12G150K			7			
TNR12G271K			7			
TNR12G331K	14	17.0	7	25	0.8	7.5
TNR12G681K			8.5			
TNR12G751K			8.5			
TNR12G102K	15	18	9	25	0.8	7.5
TNR12G112K			10			
TNR12G122K			12			
TNR12G152K	16	19	14	25	0.8	7.5
TNR12G182K			14			
TNR15G150K			14			
TNR15G150K	15 ± 1	19	5	25	0.8	7.5
TNR15G271K			7			
TNR15G331K			7			
TNR15G681K	17Max	20	7	25	0.8	7.5
TNR15G751K			8.5			
TNR15G102K			8.5			
TNR15G112K	18Max	21	9	25	0.8	7.5
TNR15G122K			10.5			
TNR15G152K			12.5			
TNR15G182K	19Max	22	14.5	25	0.8	7.5
TNR23G180K			14.5			
TNR23G271K			14.5			
TNR23G180K	24	27	5	25	0.8	10
TNR23G271K			7			
TNR23G331K			7			
TNR23G681K	25	28	7	25	0.8	10
TNR23G751K			8.5			
TNR23G102K			8.5			
TNR23G112K	26	29	9.5	25	0.8	10
TNR23G122K			11			
TNR23G152K			13			
TNR23G182K	27	30	15	25	0.8	10
TNR23G102K			9.5			
TNR23G112K			11			

Model Number	Maximum Applied Voltage (Continuous)		Maximum Peak Current (8/20μs)	Maximum Energy 2msec	Rated Wattage	Clamping Voltage		Capacitance (Typical) 1kHz	Varistor Voltage
	AC (Vrms)	DC (V)				(A)	(A)		
TNR12G150K	8	12	1.0	1.0	0.05	5	30	10,500	150 (13~17)
TNR12G180K	10	14	1.5	1.5			35	9,000	180 (16~20)
TNR12G220K	14	18	2.0	2.0	43	8,200	220 (20~24)	270 (24~30)	
TNR12G270K	17	22	2.5	2.5	53	6,900	270 (24~30)	330 (30~36)	
TNR12G330K	20	26	3.0	3.0	65	5,900	330 (30~36)	390 (35~43)	
TNR12G390K	25	30	3.5	3.5	77	5,100	390 (35~43)	470 (42~52)	
TNR12G470K	30	37	4.5	4.5	93	4,400	470 (42~52)	560 (50~62)	
TNR12G560K	30	44	5.5	5.5	110	3,800	560 (50~62)	680 (61~75)	
TNR12G680K	40	55	6.5	6.5	135	3,200	680 (61~75)	820 (74~90)	
TNR12G820K	55	65	8.0	8.0	135	1,200	820 (74~90)	1,000 (900~1,100)	
TNR12G101K	65	85	10.0	10.0	165	1,050	1,000 (900~1,100)	1,200 (1,080~1,320)	
TNR12G121K	70	100	12.0	12.0	195	910	1,200 (1,080~1,320)	1,500 (1,350~1,650)	
TNR12G151K	90	125	16.0	16.0	245	770	1,500 (1,350~1,650)	1,800 (1,620~1,980)	
TNR12G181K	110	145	18.0	18.0	295	670	1,800 (1,620~1,980)	2,200 (2,000~2,400)	
TNR12G201K	130	170	20.0	20.0	330	620	2,000 (1,800~2,200)	2,400 (2,160~2,640)	
TNR12G221K	145	180	25.0	25.0	360	570	2,200 (1,980~2,420)	2,700 (2,430~2,970)	
TNR12G241K	150	200	25.0	25.0	390	530	2,400 (2,160~2,640)	2,970 (2,673~3,267)	
TNR12G271K	170	225	30.0	30.0	440	490	2,700 (2,430~2,970)	3,300 (2,970~3,630)	
TNR12G331K	210	270	35.0	35.0	540	420	3,300 (2,970~3,630)	3,900 (3,510~4,290)	
TNR12G361K	235	300	40.0	40.0	590	400	3,600 (3,240~3,960)	4,200 (3,780~4,740)	
TNR12G391K	250	320	45.0	45.0	640	370	3,900 (3,510~4,290)	4,700 (4,230~5,170)	
TNR12G431K	270	350	45.0	45.0	700	340	4,300 (3,870~4,730)	5,100 (4,590~5,610)	
TNR12G471K	305	385	50.0	50.0	765	320	4,700 (4,230~5,170)	5,600 (5,040~6,160)	
TNR12G561K	350	460	60.0	60.0	910	280	5,600 (5,040~6,160)	6,200 (5,580~6,820)	
TNR12G621K	385	505	65.0	65.0	1,015	260	6,200 (5,580~6,820)	7,000 (6,300~7,700)	
TNR12G681K	420	560	70.0	70.0	1,110	240	6,800 (6,120~7,480)	7,800 (7,020~8,580)	
TNR12G751K	460	615	75.0	75.0	1,230	225	7,500 (6,750~8,250)	8,500 (7,650~9,350)	
TNR12G821K	515	670	80.0	80.0	1,340	210	8,200 (7,380~9,020)	9,300 (8,370~10,230)	
TNR12G911K	550	745	85.0	85.0	1,500	200	9,100 (8,190~10,010)	1,000 (900~1,100)	
TNR12G102K	630	825	90.0	90.0	1,630	180	1,000 (900~1,100)	1,100 (1,000~1,200)	
TNR12G112K	680	895	95.0	95.0	1,815	170	1,100 (990~1,210)	1,200 (1,100~1,300)	
TNR12G122K	720	980	100.0	100.0	1,950	160	1,200 (1,080~1,320)	1,300 (1,200~1,400)	
TNR12G152K	860	1,220	120.0	120.0	2,440	135	1,500 (1,350~1,650)	1,650 (1,500~1,800)	
TNR12G182K	1,000	1,465	150.0	150.0	2,970	115	1,800 (1,620~1,980)	2,000 (1,800~2,200)	
TNR15G150K	8	12	5.0	5.0	0.1	10	30	12,000	150 (13~17)
TNR15G180K	10	14	5.0	5.0			35	11,500	180 (16~20)
TNR15G220K	14	18	5.0	5.0	43	11,000	220 (20~24)	270 (24~30)	
TNR15G270K	17	22	5.0	5.0	53	10,000	270 (24~30)	330 (30~36)	
TNR15G330K	20	26	6.0	6.0	65	8,500	330 (30~36)	390 (35~43)	
TNR15G390K	25	30	10.0	10.0	77	7,500	390 (35~43)	470 (42~52)	
TNR15G470K	30	37	10.0	10.0	93	6,500	470 (42~52)	560 (50~62)	
TNR15G560K	35	44	10.0	10.0	110	5,600	560 (50~62)	680 (61~75)	
TNR15G680K	40	55	12.0	12.0	135	4,800	680 (61~75)	820 (74~90)	
TNR15G820K	50	65	15.0	15.0	135	1,700	820 (74~90)	1,000 (900~1,100)	
TNR15G101K	60	85	20.0	20.0	165	1,470	1,000 (900~1,100)	1,200 (1,080~1,320)	
TNR15G121K	75	100	20.0	20.0	195	1,280	1,200 (1,080~1,320)	1,500 (1,350~1,650)	
TNR15G151K	95	125	25.0	25.0	245	1,070	1,500 (1,350~1,650)	1,800 (1,620~1,980)	
TNR15G181K	110	145	30.0	30.0	295	930	1,800 (1,620~1,980)	2,200 (2,000~2,400)	
TNR15G201K	130	170	35.0	35.0	330	850	2,000 (1,800~2,200)	2,400 (2,160~2,640)	
TNR15G221K	140	180	40.0	40.0	360	800	2,200 (1,980~2,420)	2,700 (2,430~2,970)	
TNR15G241K	150	200	40.0	40.0	390	740	2,400 (2,160~2,640)	2,970 (2,673~3,267)	
TNR15G271K	175	225	50.0	50.0	440	680	2,700 (2,430~2,970)	3,300 (2,970~3,630)	
TNR15G331K	210	270	60.0	60.0	540	590	3,300 (2,970~3,630)	3,900 (3,510~4,290)	
TNR15G361K	230	300	65.0	65.0	590	540	3,600 (3,240~3,960)	4,200 (3,780~4,740)	
TNR15G391K	250	320	70.0	70.0	640	510	3,900 (3,510~4,290)	4,700 (4,230~5,170)	
TNR15G431K	275	350	75.0	75.0	700	480	4,300 (3,870~4,730)	5,100 (4,590~5,610)	
TNR15G471K	300	385	80.0	80.0	765	450	4,700 (4,230~5,170)	5,600 (5,040~6,160)	
TNR15G561K	350	460	85.0	85.0	910	390	5,600 (5,040~6,160)	6,200 (5,580~6,820)	
TNR15G621K	385	505	85.0	85.0	1,015	360	6,200 (5,580~6,820)	7,000 (6,300~7,700)	
TNR15G681K	420	560	90.0	90.0	1,110	340	6,800 (6,120~7,480)	7,800 (7,020~8,580)	
TNR15G751K	460	615	100.0	100.0	1,230	310	7,500 (6,750~8,250)	8,500 (7,650~9,350)	
TNR15G821K	510	670	110.0	110.0	1,340	280	8,200 (7,380~9,020)	9,300 (8,370~10,230)	
TNR15G911K	550	745	120.0	120.0	1,500	265	9,100 (8,190~10,010)	1,000 (900~1,100)	
TNR15G102K	625	825	130.0	130.0	1,630	250	1,000 (900~1,100)	1,100 (1,000~1,200)	
TNR15G112K	680	895	140.0	140.0	1,815	230	1,100 (990~1,210)	1,200 (1,100~1,300)	
TNR15G122K	720	980	150.0	150.0	1,950	215	1,200 (1,080~1,320)	1,300 (1,200~1,400)	
TNR15G152K	860	1,220	160.0	160.0	2,440	185	1,500 (1,350~1,650)	1,650 (1,500~1,800)	
TNR15G182K	1,000	1,465	170.0	170.0	2,970	150	1,800 (1,620~1,980)	2,000 (1,800~2,200)	
TNR23G180K	10	14	10.0	10.0	0.2	20	35	31,000	180 (16~20)
TNR23G220K	14	18	13.0	13.0			43	30,000	220 (20~24)
TNR23G270K	17	22	15.0	15.0	53	27,000	270 (24~30)	330 (30~36)	
TNR23G330K	20	26	20.0	20.0	65	23,000	330 (30~36)	390 (35~43)	
TNR23G390K	25	30	24.0	24.0	77	20,000	390 (35~43)	470 (42~52)	
TNR23G470K	30	37	30.0	30.0	93	17,500	470 (42~52)	560 (50~62)	
TNR23G560K	35	44	35.0	35.0	110	15,000	560 (50~62)	680 (61~75)	
TNR23G680K	40	55	40.0	40.0	135	13,000	680 (61~75)	820 (74~90)	
TNR23G820K	50	65	27.0	27.0	135	4,600	820 (74~90)	1,000 (900~1,100)	
TNR23G101K	60	85	30.0	30.0	165	3,900	1,000 (900~1,100)	1,200 (1,080~1,320)	
TNR23G121K	75	100	40.0	40.0	195	3,400	1,200 (1,080~1,320)	1,500 (1,350~1,650)	
TNR23G151K	95	125	50.0	50.0	245	2,900	1,500 (1,350~1,650)	1,800 (1,620~1,980)	
TNR23G181K	110	145	60.0	60.0	295	2,500	1,800 (1,620~1,980)	2,200 (2,000~2,400)	
TNR23G201K	130	170	70.0	70.0	330	2,300	2,000 (1,800~2,200)	2,400 (2,160~2,640)	
TNR23G221K	140	180	75.0	75.0	360	2,150	2,200 (1,980~2,420)	2,700 (2,430~2,970)	
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