

Table R2. Thermal Derating for Radial-leaded Devices [Hold Current (A) at Ambient Temperature (°C)]

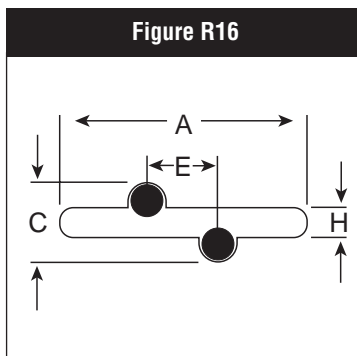
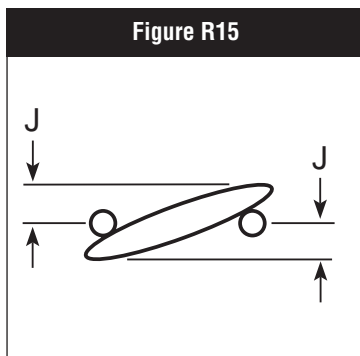
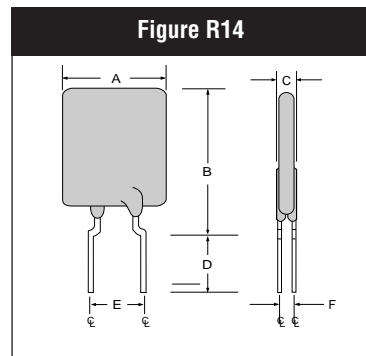
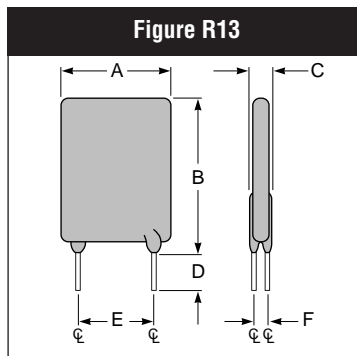
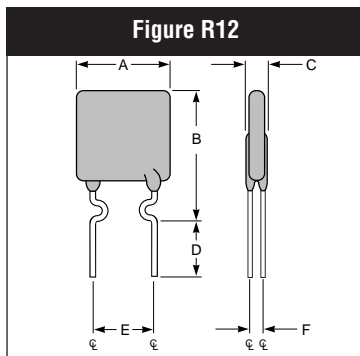
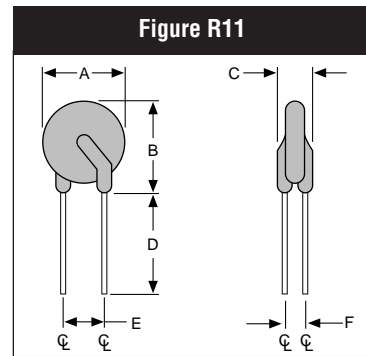
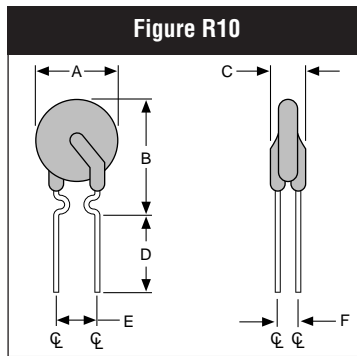
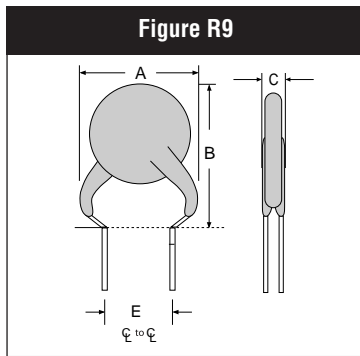
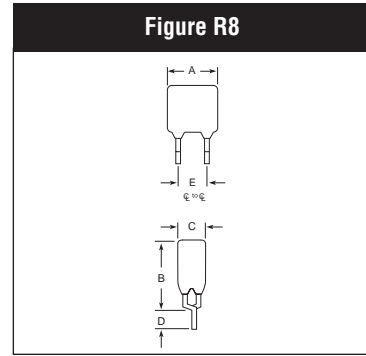
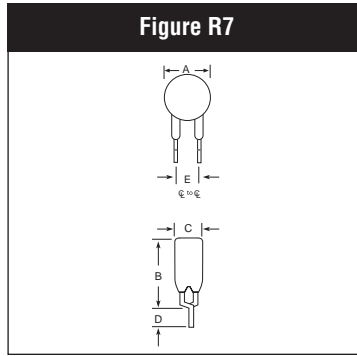
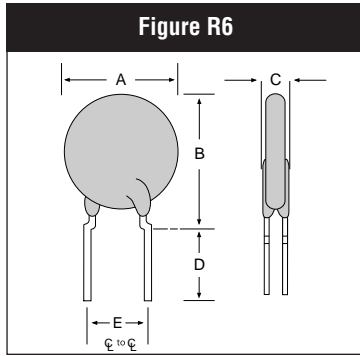
Part Number	Maximum Ambient Temperature										
	-40°C	-20°C	0°C	20°C	25°C	40°C	50°C	60°C	70°C	85°C	125°C
LVR (Pb-free product)											
240V_{AC}											
New LVR005	—	0.08	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	—
New LVR008	—	0.12	0.10	0.08	0.08	0.07	0.06	0.05	0.04	0.03	—
New LVR012	—	0.18	0.15	0.12	0.12	0.10	0.09	0.07	0.06	0.04	—
New LVR016	—	0.24	0.20	0.16	0.16	0.13	0.11	0.10	0.08	0.05	—
New LVR025	—	0.38	0.32	0.26	0.25	0.21	0.18	0.15	0.13	0.09	—
New LVR033	—	0.50	0.42	0.34	0.33	0.27	0.23	0.20	0.17	0.11	—
New LVR040	—	0.61	0.51	0.41	0.40	0.33	0.28	0.24	0.20	0.14	—
New LVR055K	—	0.80	0.68	0.55	0.54	0.46	0.40	0.35	0.29	0.22	—
New LVR055S	—	0.80	0.68	0.55	0.54	0.46	0.40	0.35	0.29	0.22	—
BBR (BBRF for Pb-free version of product)											
99V_{AC}											
BBR550	0.85	0.75	0.65	0.55	—	0.45	0.40	0.35	0.3	0.22	—
BBR750	1.15	1.00	0.90	0.75	—	0.61	0.55	0.48	0.41	0.30	—
TR250, TR600											
60/600V For a complete selection of the TR series see the Telecommunications and Network section.											
TR250-080U	0.124	0.110	0.095	0.080	0.077	0.066	0.059	0.051	0.044	0.033	—
TR250-120	0.186	0.165	0.143	0.120	0.115	0.099	0.088	0.077	0.066	0.050	—
TR250-145	0.225	0.199	0.172	0.145	0.139	0.119	0.106	0.093	0.080	0.060	—
TRF250-180	0.269	0.240	0.211	0.180	0.173	0.153	0.138	0.123	0.109	0.087	—
TR600-150	0.233	0.206	0.178	0.150	0.143	0.124	0.110	0.096	0.083	0.062	—
TR600-160	0.249	0.219	0.190	0.160	0.153	0.132	0.117	0.103	0.088	0.066	—
RXE (RXEF for Pb-free version of product)											
60V											
RXE005	0.078	0.068	0.06	0.05	0.048	0.04	0.035	0.032	0.027	0.02	—
RXE010	0.16	0.14	0.11	0.10	0.096	0.08	0.072	0.067	0.05	0.04	—
RXE017	0.26	0.23	0.21	0.17	0.16	0.14	0.12	0.11	0.09	0.07	—
RXE (RXEF for Pb-free version of product)											
72V											
RXE020	0.31	0.27	0.24	0.20	0.19	0.16	0.14	0.13	0.11	0.08	—
RXE025	0.39	0.34	0.30	0.25	0.24	0.20	0.18	0.16	0.14	0.10	—
RXE030	0.47	0.41	0.36	0.30	0.29	0.24	0.22	0.20	0.16	0.12	—
RXE040	0.62	0.54	0.48	0.40	0.38	0.32	0.29	0.25	0.22	0.16	—
RXE050	0.78	0.68	0.60	0.50	0.48	0.41	0.36	0.32	0.27	0.20	—
RXE065	1.01	0.88	0.77	0.65	0.62	0.53	0.47	0.41	0.35	0.26	—
RXE075	1.16	1.02	0.89	0.75	0.72	0.61	0.54	0.47	0.41	0.30	—
RXE090	1.40	1.22	1.07	0.90	0.86	0.73	0.65	0.57	0.49	0.36	—
RXE110	1.71	1.50	1.31	1.10	1.06	0.89	0.79	0.69	0.59	0.44	—
RXE135	2.09	1.84	1.61	1.35	1.30	1.09	0.97	0.85	0.73	0.54	—
RXE160	2.48	2.18	1.90	1.60	1.54	1.30	1.15	1.01	0.86	0.64	—
RXE185	2.87	2.52	2.20	1.85	1.78	1.50	1.33	1.17	1.00	0.74	—
RXE250	3.88	3.40	2.98	2.50	2.40	2.03	1.80	1.58	1.35	1.00	—
RXE300	4.65	4.08	3.57	3.00	2.88	2.43	2.16	1.89	1.62	1.20	—
RXE375	5.81	5.10	4.46	3.75	3.60	3.04	2.70	2.36	2.03	1.50	—



Table R3. Electrical Characteristics for Radial-led Devices

Part Number	I _H (A)	I _T (A)	V _{MAX} (V)	V _{MAX} Interrupt (V _{AC})	I _{MAX} (A)	P _{D TYP} (W)	Max. Time-to-trip (A) (s)		R _{MIN} (Ω)	R _{MAX} (Ω)	R _{1 MAX} (Ω)	Figures for Dimensions	Lead Size [mm ² (AWG)]
LVR (Pb-free product)													
240V_{AC}													
LVR005K	0.05	0.12	240	265	1.0	0.7	0.25	15	18.5	31.0	65.0	R7	[0.205mm ² (24)]
LVR005S	0.05	0.12	240	265	1.0	0.7	0.25	15	18.5	31.0	65.0	R7	[0.205mm ² (24)]
LVR008K	0.08	0.19	240	265	1.2	0.8	0.4	15	7.4	12.0	26.0	R7	[0.205mm ² (24)]
LVR008S	0.08	0.19	240	265	1.2	0.8	0.4	15	7.4	12.0	26.0	R7	[0.205mm ² (24)]
LVR012K	0.12	0.30	240	265	1.2	1.0	0.6	15	3.0	6.5	12.0	R7	[0.205mm ² (24)]
LVR012S	0.12	0.30	240	265	1.2	1.0	0.6	15	3.0	6.5	12.0	R7	[0.205mm ² (24)]
LVR016K	0.16	0.37	240	265	2.0	1.4	0.8	15	2.5	4.1	7.8	R7	[0.205mm ² (24)]
LVR016S	0.16	0.37	240	265	2.0	1.4	0.8	15	2.5	4.1	7.8	R7	[0.205mm ² (24)]
LVR025K	0.25	0.56	240	265	3.5	1.5	1.25	18.5	1.3	2.1	3.8	R8	[0.33mm ² (22)]
LVR025S	0.25	0.56	240	265	3.5	1.5	1.25	18.5	1.3	2.1	3.8	R8	[0.33mm ² (22)]
LVR033S	0.33	0.74	240	265	4.5	1.7	1.25	18.5	0.83	1.24	2.6	R8	[0.33mm ² (22)]
LVR033K	0.33	0.74	240	265	4.5	1.7	1.25	18.5	0.83	1.24	2.6	R8	[0.33mm ² (22)]
LVR040K	0.40	0.90	240	265	5.5	2.0	2.0	24.0	0.6	0.97	1.9	R8	[0.33mm ² (22)]
LVR040S	0.40	0.90	240	265	5.5	2.0	2.0	24.0	0.6	0.97	1.9	R8	[0.33mm ² (22)]
LVR055K	0.55	1.25	240	265	7.0	3.4	2.75	26.0	0.45	0.73	1.45	R8	[0.52mm ² (20)]
LVR055S	0.55	1.25	240	265	7.0	3.4	2.75	26.0	0.45	0.73	1.45	R8	[0.52mm ² (20)]
BBR (BBRF for Pb-free version of product)													
99V_{AC}													
BBR550	0.55	1.1	99	—	20	1.5	1.6	60	0.8	1.3	1.95	R6, R15, R16	[0.52mm ² (20)]
BBR750	0.75	1.5	99	—	20	1.7	2.0	60	0.40	0.75	1.2	R6, R15, R16	[0.52mm ² (20)]
TR250, TR600													
60/600V Product For a complete selection of the TR devices, see the Telecommunications and Networking section.													
TR250-080U	0.080	0.160	60	250	3.0	1.0	0.35	3.0	14.0	20.0	33.0	R7	[0.33mm ² (22)]
TR250-120	0.120	0.240	60	250	3.0	1.0	1.0	1.5*	4.0	8.0	16.0	R8	[0.33mm ² (22)]
TR250-145	0.145	0.290	60	250	3.0	1.0	1.0	2.5*	3.0	6.0	14.0	R8	[0.33mm ² (22)]
TR250-180U	0.180	0.360	60	250	10.0	1.0	1.0	12.0*	0.8	2.0	4.0	R8	[0.33mm ² (22)]
TR600-150	0.150	0.300	60	250	3.0	1.0	1.0	5.0*	6.0	12.0	22.0	R8	[0.33mm ² (22)]
TR600-160	0.160	0.320	60	250	3.0	1.0	1.0	7.0*	4.0	10.0	18.0	R8	[0.33mm ² (22)]
*Time-to-trip value is typical.													
RXE (RXEF for Pb-free version of product)													
60V													
RXE005	0.05	0.10	60	—	40	0.26	0.25	5.0	7.3	11.10	20.0	R9, R15, R16	[0.128mm ² (26)]
RXE010	0.10	0.20	60	—	40	0.38	0.50	4.0	2.5	4.50	7.5	R10, R15, R16	[0.205mm ² (24)]
RXE017	0.17	0.34	60	—	40	0.48	0.85	3.0	3.3	5.21	8.0	R10, R15, R16	[0.205mm ² (24)]
RXE (RXEF for Pb-free version of product)													
72V													
RXE020	0.20	0.40	72	—	40	0.41	1.00	2.2	1.83	2.75	4.40	R10, R15, R16	[0.205mm ² (24)]
RXE025	0.25	0.50	72	—	40	0.45	1.25	2.5	1.25	1.95	3.00	R10, R15, R16	[0.205mm ² (24)]
RXE030	0.30	0.60	72	—	40	0.49	1.50	3.0	0.88	1.33	2.10	R10, R15, R16	[0.205mm ² (24)]
RXE040	0.40	0.80	72	—	40	0.56	2.00	3.8	0.55	0.86	1.29	R10, R15, R16	[0.205mm ² (24)]
RXE050	0.50	1.00	72	—	40	0.77	2.50	4.0	0.50	0.77	1.17	R10, R15, R16	[0.205mm ² (24)]
RXE065	0.65	1.30	72	—	40	0.88	3.25	5.3	0.31	0.48	0.72	R10, R15, R16	[0.205mm ² (24)]
RXE075	0.75	1.50	72	—	40	0.92	3.75	6.3	0.25	0.40	0.60	R10, R15, R16	[0.205mm ² (24)]
RXE090	0.90	1.80	72	—	40	0.99	4.50	7.2	0.20	0.31	0.47	R10, R15, R16	[0.205mm ² (24)]
RXE110	1.10	2.20	72	—	40	1.50	5.50	8.2	0.15	0.25	0.38	R11, R15, R16	[0.52mm ² (20)]
RXE135	1.35	2.70	72	—	40	1.70	6.75	9.6	0.12	0.19	0.30	R11, R15, R16	[0.52mm ² (20)]
RXE160	1.60	3.20	72	—	40	1.90	8.00	11.4	0.09	0.14	0.22	R11, R15, R16	[0.52mm ² (20)]
RXE185	1.85	3.70	72	—	40	2.10	9.25	12.6	0.08	0.12	0.19	R11, R15, R16	[0.52mm ² (20)]
RXE250	2.50	5.00	72	—	40	2.50	12.50	15.6	0.05	0.08	0.13	R11, R15, R16	[0.52mm ² (20)]
RXE300	3.00	6.00	72	—	40	2.80	15.00	19.8	0.04	0.06	0.10	R11, R15, R16	[0.52mm ² (20)]
RXE375	3.75	7.50	72	—	40	3.20	18.75	24.0	0.03	0.05	0.08	R11, R15, R16	[0.52mm ² (20)]

Figures R6–R16. Physical Description for Dimensions for Radial-leaded Devices



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