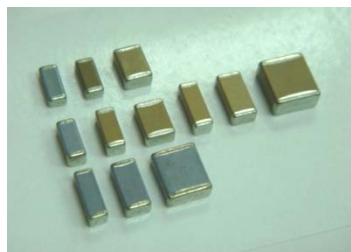


SCC Series

Safety Capacitors rated to 250Vac

X1/Y2, X2/Y3 & X2



The SCC series of **X1/Y2**, **X2/Y3** & **X2** safety capacitors are designed specifically for use in modem, facsimile, telephone and other electronic equipment. These parts are compliant to EN/IEC60384-14 and UL60950-1 standards. These capacitors are available in NP0 (C0G), SL and X7R dielectrics.

◆ Features

- ❑ Small size & high capacitance values.
- ❑ Suitable for reflow soldering.
- ❑ Surface mount.
- ❑ RoHS compliant and Lead (Pb) free option.
- ❑ Safety standard approval by EN/IEC 60384-14 and UL 60950-1.
- ❑ Certified to:
 - TUV R50005234, R50103496 & UL E229738
 - TUV R50162550 & UL E229738 for Lead (Pb) free.

◆ Application

- ❑ Specially designed for use in modem, facsimile, telephone and other telecommunication equipment, electronic equipment for lightning and surge protection, EMI filtering and isolation.

◆ Safety Detail of Specifications

EN 60384-1: 2001 EN 60384-14: 2005	Meets the electrical requirements and certification for equipment requiring class X1/Y2 and X2/Y3 devices.
IEC 60950-1 : 2005	Component certified for equipment requiring IEC 60950 compliance
IEC 60384-1: 1999 IEC 60384-14: 2005	Component certified for equipment requiring IEC-384 compliance
UL 60950-1: 2007 2nd edition	TNV/SELV Isolation capacitors certified to UL 60950 -1

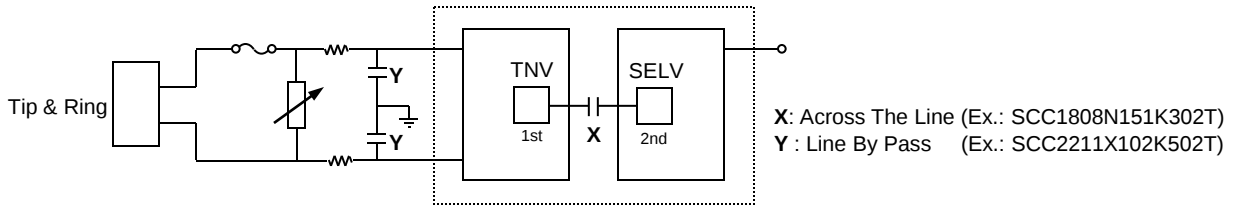
◆ How To Order

Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Class	Packaging	Special Requirement
SCC :	Ex. :	Ex. :	Ex. :	Ex. :	Ex. :	T : Tape & Reel B : Bulk	Ex. : S : Arc Prevention Coating X : Polymer Termination (SuperTerm) Z : Arc Prevention Coating & SuperTerm G : Lead (Pb) free
Safety approved MLCC	1808 1812 2208 2211 2220 2825	N : NP0 X : X7R L : SL	2R0 : 2.0pF 100 : 10×10 ⁰ 471 : 47×10 ¹ 182 : 18×10 ²	J : +/- 5% K : +/-10% M : +/-20%	202 : X2 302 : X2/Y3 502 : X1/Y2 602 : X1/Y2 for SCC2208N, SCC2211N, SCC2220N		

◆ Summary of Specifications

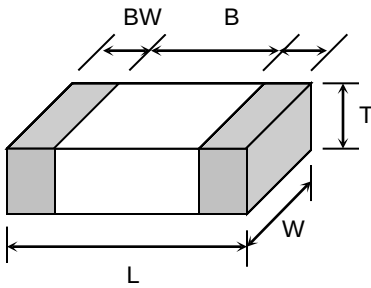
Rated Voltage	AC 250Vrms
Temperature Coefficient	NP0 : < 30ppm/ °C , -55~+125 °C (EIA Class I)
	SL: +350~ -1000ppm/°C -55~+85°C
	X7R : < ± 15% , -55~+125 °C (EIA Class II)
Capacitance Range	See table below
Quality and Dissipation Factor	NP0/SL : $Q \geq 1000$; X7R : D.F. $\leq 2.5\%$
Climatic Category	-55/125/21
Insulation Resistance	10GΩ
Voltage Proof	X Capacitor : Applied Voltage 1075Vdc(4.3Ur) Y Capacitor : Applied Voltage 1500Vac
Impulse	Y3 : 2.5KV (Compliant to IEC 60950) ; X2 : 2.5KV / Y2 : 5KV for three times
Ageing	NP0 : 0 % ; SL : 1.5% ; X7R : 1.0 % per decade hr, typical

◆ Application Example Circuit



◆ Dimensions

Unit : mm [inches]



TYPE	L	W	T (max)	B (min)	BW (min)
1808	4.60±0.3 [.181±.012]	2.00±0.2 [.079±.008]	2.20 [.087]	2.50 [.098]	0.20 [.008]
1812	4.60±0.3 [.181±.012]	3.20±0.3 [.126±.012]	2.60 [.102]	2.50 [.098]	0.20 [.008]
2208	5.70±0.4 [.220±.016]	2.00±0.2 [.079±.008]	2.20 [.087]	4.00 [.157]	0.30 [.012]
2211	5.70±0.4 [.220±.016]	2.80±0.3 [.110±.012]	3.00 [.118]	4.00 [.157]	0.30 [.012]
2220	5.70±0.4 [.220±.016]	5.00±0.4 [.197±.016]	3.00 [.118]	4.00 [.157]	0.30 [.012]
2825	6.80±0.4 [.280±.016]	6.35±0.4 [.197±.016]	4.00 [.157]	4.00 [.157]	0.30 [.012]

Class	Size	Temperature Characteristic	Rated Voltage	Certificated	Capacitance Range (pF)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
					2R0	5R0	6R8	8R2	100	120	150	180	220	270	330	360	390	470	560	680	820	101	121	131	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	472	562	682	822	103	123	153	183	223	273	333	473	563	683	823	104	124	154	184	224	274	334	474	564	684	824	105	125	155	185	225	275	335	475	565	685	825	106	126	156	186	226	276	336	476	566	686	826	107	127	157	187	227	277	337	477	567	687	827	108	128	158	188	228	278	338	478	568	688	828	109	129	159	189	229	279	339	479	569	689	829	110	130	160	190	230	280	340	480	570	690	830	111	131	161	191	231	281	341	481	571	691	831	112	132	162	192	232	282	342	482	572	692	832	113	133	163	193	233	283	343	483	573	693	833	114	134	164	194	234	284	344	484	574	694	834	115	135	165	195	235	285	345	485	575	695	835	116	136	166	196	236	286	346	486	576	696	836	117	137	167	197	237	287	347	487	577	697	837	118	138	168	198	238	288	348	488	578	698	838	119	139	169	199	239	289	349	489	579	699	839	120	140	170	200	240	290	350	490	580	700	840	121	141	171	201	241	291	351	491	581	701	841	122	142	172	202	242	292	352	492	582	702	842	123	143	173	203	243	293	353	493	583	703	843	124	144	174	204	244	294	354	494	584	704	844	125	145	175	205	245	295	355	495	585	705	845	126	146	176	206	246	296	356	496	586	706	846	127	147	177	207	247	297	357	497	587	707	847	128	148	178	208	248	298	358	498	588	708	848	129	149	179	209	249	299	359	499	589	709	849	130	150	180	210	250	300	360	500	590	710	850	131	151	181	211	251	301	361	501	591	711	851	132	152	182	212	252	302	362	502	592	712	852	133	153	183	213	253	303	363	503	593	713	853	134	154	184	214	254	304	364	504	594	714	854	135	155	185	215	255	305	365	505	595	715	855	136	156	186	216	256	306	366	506	596	716	856	137	157	187	217	257	307	367	507	597	717	857	138	158	188	218	258	308	368	508	598	718	858	139	159	189	219	259	309	369	509	599	719	859	140	160	190	220	260	310	370	510	600	720	860	141	161	191	221	261	311	371	511	601	721	861	142	162	192	222	262	312	372	512	602	722	862	143	163	193	223	263	313	373	513	603	723	863	144	164	194	224	264	314

[illegible]