



## VZCA8.E327997 Surge-protective Devices Certified for Canada - Component

[Page Bottom](#)

### Surge-protective Devices Certified for Canada - Component

[See General Information for Surge-protective Devices Certified for Canada - Component](#)

#### BRIGHTKING (SHENZHEN) CO LTD

E327997

2nd FI Tianan Management Center Bldg  
Tian An Cyber Park  
Futian District  
Shenzhen, Guangdong 518040 CHINA

#### Legacy Requirements, Effective Until June 28, 2019

**Surge-protective device, Type 4, For use in other than SPD applications, "Varistors",** Cat No. 05D or 07D followed by 101K, 121K, or 820K; D05 or 07D, preceded by 101K, 121K, or 820K. All models may be suffixed by A thru Z or 0 thru 9.

10D, followed by 820K, 101K, 121K, 151K, 621K; D10, preceded by 820K, 101K, 121K, 151K, 621K. All models may be suffixed by A thru Z or 0 thru 9.

**Surge-protective device, Type 4, For use in other than SPD applications,** Cat No. 05A, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K; A05, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K; 05D, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K followed by -D; D05, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K followed by -D. All models may be suffixed by A thru Z or 0 thru 9.

05D followed by 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K or 561K; D05 preceded by 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K or 561K; 07D followed by 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K, 511K, 561K, 621K or 681K; D07 preceded by 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K, 511K, 561K, 621K or 681K; 10D followed by 180K, 220K, 270K, 330K, 390K, 470K, 560K or 680K; 14D followed by 180K, 220K, 270K, 330K, 390K, 470K, 560K or 680K; D14 preceded by 180K, 220K, 270K, 330K, 390K, 470K, 560K or 680K; 20D followed by 180K, 220K, 270K, 330K, 390K, 470K, 560K or 680K; D20 preceded by 180K, 220K, 270K, 330K, 390K, 470K, 560K or 680K. All models may be followed by suffixes.

05D, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K; D05, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K, All models may be suffixed by A thru Z or 0 thru 9.

07A, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K; A07, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K; 07D, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K followed by -D; D07, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K, followed by -D, All models may be suffixed by A thru Z or 0 thru 9.

07D, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K; D07, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K or 471K, All models may be suffixed by A thru Z or 0 thru 9.

10A, followed by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K; A10, preceded by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K; 10D, followed by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K followed by -D; D10, preceded by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K followed by -D. All models may be suffixed by A thru Z or 0 thru 9.

10D, followed by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K; and D10, preceded by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K. preceded by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K. 10D, followed by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K followed by -D; D10, preceded by 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 911K, 102K or 112K followed by -D. All models may be suffixed by A thru Z or 0 thru 9.

**Surge-protective device, Type 4, For use in SPD Type 1 applications,** Cat No. 22S followed by 201K, 241K, 271K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K; S22 preceded by 201K, 241K, 271K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K; 32D followed by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; D32 preceded by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; 34S followed by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; S34 preceded by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; 34R followed by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K; R34 preceded by 201K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K; 40D followed by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; D40 preceded by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; 53D followed by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K; D53 preceded by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 951K, 102K, 112K, 122K, 142K. All models may be suffixed by A thru Z or 0 thru 9.

**Surge-protective device, Type 4, For use in SPD Type 2 applications, "Silicon avalanche diodes",** Cat No. HFA, followed by -012, -015, -020, -025, -030, -042, -058, -066, -076, -100, -133, -170, -190, -200, followed by L, C or S. All models may be prefix or/and suffix with A thru Z or/and 0 thru 9 or none.

HFB, followed by -012, -015, -020, -025, -030, -042, -058, -066, -076, -100, -133, -170, -190, -200, -240, -275, -300, -380, followed by L, C or S. All models may be prefix or/and suffix with A thru Z or/and 0 thru 9 or none.

HFC, followed by -012, -020, -030, -042, -058, -066, -076, -100, -133, -170, -190, followed by L, C or S. All models may be prefix or/and suffix with A thru Z or/and 0 thru 9 or none.

HFD, followed by -015, -025, -030, -042, -058, -066, -076, -100, -133, -170, -190, followed by L, C or S. All models may be prefix or/and suffix with A thru Z or/and 0 thru 9 or none.

**Surge-protective device, Type 4, For use in SPD Type 2 applications,** Cat No. 10D, followed by 471K, 511K, 561K, 681K, 751K, 781K, 821K; D10, preceded by 471K, 511K, 561K, 681K, 751K, 781K, 821K; 14D, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K; D14, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K; 20D, followed by 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K, 122K, 142K, 162K or 182K; D20, preceded by 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K, 122K, 142K, 162K or 182K; 25D, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K, 122K, 142K or 162K; D25, preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K, 122K, 142K or 162K. All model may be suffixed by A thru Z or o thru 9.

**Surge-protective device, Type 4, For use in SPD Type 3 applications, "Varistors",** Cat No. 14D, followed by 820K or 101K; D14 preceded by 820K or 101K. All models may be suffixed by A thru Z or O thru 9.

20S, followed by 201K or 241K; S20, preceded by 201K or 241K. All models may be suffixed by A thru Z or O thru 9.

**Surge-protective device, Type 4, For use in SPD Type 3 applications,** Cat No. 14D, followed by 121K, 151K, 181K, 201K, 221K, 241K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K or 182K; D14, preceded by 121K, 151K, 181K, 201K, 221K, 241K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K or 182K; 20D, followed by 820K, 101K, 121K, 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K or 182K; D20, preceded by 820K, 101K, 121K, 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K or 182K; 25D, followed by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K or 122K; D25, preceded by 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, 112K or 122K. All models may be followed by suffixes.

22S470K, 22S680K, 22S820K, 22S101K, 22S121K, 470KS22, 680KS22, 820KS22, 101KS22, 121KS22, may be followed by suffixes.

32D followed by 201K, 241K, 271K, 361K, 391K, 431K, 471K, 511K, 621K, 681K, 751K, 781K, 821K, 911K, 102K or 112K; D32, preceded by 201K, 241K, 271K, 361K, 391K, 431K, 471K, 511K, 621K, 681K, 751K, 781K, 821K, 911K, 102K or 112K; 40D or 40R, followed by 201K, 241K, 271K, 361K, 391K, 431K, 471K, 511K, 621K, 681K, 751K, 781K, 821K, 911K, 102K, or 112K; D40 or R40, preceded by 201K, 241K, 271K, 361K, 391K, 431K, 471K, 511K, 621K, 681K, 751K, 781K, 821K, 911K, 102K or 112K; 53D, followed by 201K, 241K, 271K, 361K, 391K, 431K, 471K, 511K, 621K, 681K, 751K, 781K, 821K, 911K, 102K or 112K; D53, preceded by 201K, 241K, 271K, 361K, 391K, 431K, 471K, 511K, 621K, 681K, 751K, 781K, 821K, 911K, 102K or 112K. All models may be suffixed by A thru Z or O thru 9.

Tradename or trademark, followed by 14M, 14N or 14E, followed by 820K, 101K, 121K, 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K or 681K; M14, N14, E14 preceded by 820K, 101K, 121K, 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K or 681K; Tradename or trademark, followed by 25M, 25N or 25E, followed by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 621K or 681K; M25, N25, E25 preceded by 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561, 621K or 681K. All models may be followed by J, E or X, where X may be A thru Z or/and O thru 9.

Tradename or trademark, followed by 20M, 20N or 20E, followed by 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K, 820K, 101K, 121K, 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 591K, 621K or 681K; Cat. Nos. M20, N20, E20 preceded by 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K, 820K, 101K, 121K, 151K, 181K, 201K, 221K, 241K, 271K, 301K, 331K, 361K, 391K, 431K, 471K, 511K, 561K, 591K, 621K or 681K. All models may be followed by J, E or X, where X may be A thru Z or/and O thru 9.

**Legacy requirements, Effective until June 28, 2019**

Cat No.	SPD Type	Volts (V)	AC/DC/ DC PV	PH	AMPS (A)	AMB (°C)Min	AMB (°C)Max	MODE	VPR (Vpk)	MLV (Vpk)	MCOV (V)	Vn (Vdc)	In (kA)	SCCR (kA)	NOTES
102KE14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	3	n/a	1
102KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	5	n/a	1
102KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2120	250	1000	3	n/a	1
102KM14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	3	n/a	1
102KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	5	n/a	1
102KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2120	250	1000	3	n/a	1
102KN14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	3	n/a	1
102KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	5	n/a	1
102KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2120	250	1000	3	n/a	1
112KE14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	3	n/a	1
112KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	5	n/a	1
112KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2290	250	1100	3	n/a	1
112KM14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	3	n/a	1
112KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	5	n/a	1
112KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2290	250	1100	3	n/a	1
112KN14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	3	n/a	1
112KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	5	n/a	1
112KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2290	250	1100	3	n/a	1
122KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2670	250	1200	5	n/a	1
122KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2460	250	1200	3	n/a	1
122KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2670	250	1200	5	n/a	1
122KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2460	250	1200	3	n/a	1
122KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2670	250	1200	5	n/a	1

122KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2460	250	1200	3	n/a	1
14E102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	3	n/a	1
14E112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	3	n/a	1
14E751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
14E781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1730	250	780	3	n/a	1
14E821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1590	250	820	3	n/a	1
14E911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	3	n/a	1
14M102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	3	n/a	1
14M112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	3	n/a	1
14M751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
14M781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1730	250	780	3	n/a	1
14M821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1590	250	820	3	n/a	1
14M911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	3	n/a	1
14N102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	3	n/a	1
14N112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	3	n/a	1
14N751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
14N781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1730	250	780	3	n/a	1
14N821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1590	250	820	3	n/a	1
14N911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	3	n/a	1
20(A)102K*	4CA	625	AC	1	n/a	-	85	Ld-Ld	-	1910	625	1000	3	n/a	1
20(A)112K*	4CA	680	AC	1	n/a	-	85	Ld-Ld	-	2040	680	1100	3	n/a	1
20(A)122K*	4CA	750	AC	1	n/a	-	85	Ld-Ld	-	2210	750	1200	3	n/a	1
20(A)431K*	4CA	275	AC	1	n/a	-	85	Ld-Ld	-	900	275	430	3	n/a	1
20(A)471K*	4CA	320	AC	1	n/a	-	85	Ld-Ld	-	900	300	470	3	n/a	1
20(A)511K*	4CA	320	AC	1	n/a	-	85	Ld-Ld	-	1060	320	510	3	n/a	1
20(A)561K*	4CA	350	AC	1	n/a	-	85	Ld-Ld	-	1160	350	560	3	n/a	1
20(A)621K*	4CA	385	AC	1	n/a	-	85	Ld-Ld	-	1260	385	620	3	n/a	1
20(A)681K*	4CA	420	AC	1	n/a	-	85	Ld-Ld	-	1370	420	680	3	n/a	1
20(A)751K*	4CA	460	AC	1	n/a	-	85	Ld-Ld	-	1480	460	750	3	n/a	1
20(A)781K*	4CA	480	AC	1	n/a	-	85	Ld-Ld	-	1560	485	780	3	n/a	1
20(A)821K*	4CA	510	AC	1	n/a	-	85	Ld-Ld	-	1630	510	820	3	n/a	1
20(A)911K*	4CA	550	AC	1	n/a	-	85	Ld-Ld	-	1730	550	910	3	n/a	1
20E102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	5	n/a	1
20E112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	5	n/a	1
20E122K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2670	250	1200	5	n/a	1
20E751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1370	250	750	5	n/a	1
20E781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1450	250	780	5	n/a	1
20E821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1540	250	820	5	n/a	1
20E911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	5	n/a	1
20M102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	5	n/a	1
20M112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	5	n/a	1
20M122K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2670	250	1200	5	n/a	1
20M751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1370	250	750	5	n/a	1
20M781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1450	250	780	5	n/a	1
20M821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1540	250	820	5	n/a	1
20M911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	5	n/a	1
20N102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	1000	5	n/a	1
20N112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1970	250	1100	5	n/a	1
20N122K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2670	250	1200	5	n/a	1
20N751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1370	250	750	5	n/a	1

20N781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1450	250	780	5	n/a	1
20N821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1540	250	820	5	n/a	1
20N911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	5	n/a	1
25E102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2120	250	1000	3	n/a	1
25E112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2290	250	1100	3	n/a	1
25E122K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2460	250	1200	3	n/a	1
25E751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
25E781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1780	250	780	3	n/a	1
25E821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	820	3	n/a	1
25E911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1980	250	910	3	n/a	1
25M102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2120	250	1000	3	n/a	1
25M112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2290	250	1100	3	n/a	1
25M122K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2460	250	1200	3	n/a	1
25M751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
25M781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1780	250	780	3	n/a	1
25M821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	820	3	n/a	1
25M911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1980	250	910	3	n/a	1
25N102K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2120	250	1000	3	n/a	1
25N112K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2290	250	1100	3	n/a	1
25N122K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	2460	250	1200	3	n/a	1
25N751K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
25N781K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1780	250	780	3	n/a	1
25N821K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	820	3	n/a	1
25N911K#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1980	250	910	3	n/a	1
751KE14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
751KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1370	250	750	5	n/a	1
751KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
751KM14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
751KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1370	250	750	5	n/a	1
751KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
751KN14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
751KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1370	250	750	5	n/a	1
751KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1720	250	750	3	n/a	1
781KE14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1730	250	780	3	n/a	1
781KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1450	250	780	5	n/a	1
781KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1780	250	780	3	n/a	1
781KM14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1730	250	780	3	n/a	1
781KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1450	250	780	5	n/a	1
781KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1780	250	780	3	n/a	1
781KN14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1730	250	780	3	n/a	1
781KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1450	250	780	5	n/a	1
781KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1780	250	780	3	n/a	1
821KE14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1590	250	820	3	n/a	1
821KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1540	250	820	5	n/a	1
821KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	820	3	n/a	1
821KM14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1590	250	820	3	n/a	1
821KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1540	250	820	5	n/a	1
821KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	820	3	n/a	1
821KN14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1590	250	820	3	n/a	1
821KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1540	250	820	5	n/a	1

821KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1830	250	820	3	n/a	1
911KE14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	3	n/a	1
911KE20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	5	n/a	1
911KE25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1980	250	910	3	n/a	1
911KM14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	3	n/a	1
911KM20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	5	n/a	1
911KM25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1980	250	910	3	n/a	1
911KN14#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	3	n/a	1
911KN20#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1650	250	910	5	n/a	1
911KN25#	4CA	250	AC	1	n/a	-	85	Ld-Ld	-	1980	250	910	3	n/a	1
HFB-430L%	5	310	AC	1	n/a	-	85	Ld-Ld	-	580	310	n/a	5	n/a	1
HFC-430L%	5	310	AC	1	n/a	-	85	Ld-Ld	-	620	310	n/a	10	n/a	1
Gas Tubes															
2R(\$) 1000L	5	250	AC	1	n/a	-	85	Ld-Ld	-	2360	250	n/a	3	n/a	1
2R(\$) 1000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2360	250	n/a	3	n/a	1
2R(\$) 1000M	5	250	AC	1	n/a	-	85	Ld-Ld	-	2360	250	n/a	3	n/a	1
2R(\$) 1000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2360	250	n/a	3	n/a	1,3
2R(\$) 2000L	5	250	AC	1	n/a	-	85	Ld-Ld	-	3680	250	n/a	3	n/a	1
2R(\$) 2000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	3680	250	n/a	3	n/a	1,3
2R(\$) 2000M	5	250	AC	1	n/a	-	85	Ld-Ld	-	3680	250	n/a	3	n/a	1
2R(\$) 2000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	3680	250	n/a	3	n/a	1,3
2R(\$) 2500L	5	250	AC	1	n/a	-	85	Ld-Ld	-	4300	250	n/a	3	n/a	1
2R(\$) 2500L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	4300	250	n/a	3	n/a	1,3
2R(\$) 2500M	5	250	AC	1	n/a	-	85	Ld-Ld	-	4300	250	n/a	3	n/a	1
2R(\$) 2500M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	4300	250	n/a	3	n/a	1,3
2R(\$) 600L	5	250	AC	1	n/a	-	85	Ld-Ld	-	2040	250	n/a	10	n/a	1
2R(\$) 600L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2040	250	n/a	10	n/a	1,3
2R(\$) 600M	5	250	AC	1	n/a	-	85	Ld-Ld	-	2040	250	n/a	10	n/a	1
2R(\$) 600M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2040	250	n/a	10	n/a	1,3
2R(\$) 800L	5	250	AC	1	n/a	-	85	Ld-Ld	-	2310	250	n/a	10	n/a	1
2R(\$) 800L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2310	250	n/a	10	n/a	1,3
2R(\$) 800M	5	250	AC	1	n/a	-	85	Ld-Ld	-	2310	250	n/a	10	n/a	1
2R(\$) 800M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2310	250	n/a	10	n/a	1,3
2R(&) 1000L	5	250	AC	1	n/a	-	85	Ld-Ld	-	2240	250	n/a	5	n/a	1
2R(&) 1000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2240	250	n/a	5	n/a	1,3
2R(&) 1000M	5	250	AC	1	n/a	-	85	Ld-Ld	-	2240	250	n/a	5	n/a	1
2R(&) 1000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2240	250	n/a	5	n/a	1,3
2R(&) 2000L	5	250	AC	1	n/a	-	85	Ld-Ld	-	3760	250	n/a	5	n/a	1
2R(&) 2000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	3760	250	n/a	5	n/a	1,3
2R(&) 2000M	5	250	AC	1	n/a	-	85	Ld-Ld	-	3760	250	n/a	5	n/a	1
2R(&) 2000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	3760	250	n/a	5	n/a	1,3
2R(&) 2500L	5	250	AC	1	n/a	-	85	Ld-Ld	-	4500	250	n/a	5	n/a	1
2R(&) 2500L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	4500	250	n/a	5	n/a	1,3
2R(&) 2500M	5	250	AC	1	n/a	-	85	Ld-Ld	-	4500	250	n/a	5	n/a	1
2R(&) 2500M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	4500	250	n/a	5	n/a	1,3
2R(&) 600L	5	250	AC	1	n/a	-	85	Ld-Ld	-	1400	250	n/a	5	n/a	1
2R(&) 600L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	1400	250	n/a	5	n/a	1,3
2R(&) 600M	5	250	AC	1	n/a	-	85	Ld-Ld	-	1400	250	n/a	5	n/a	1
2R(&) 600M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	1400	250	n/a	5	n/a	1,3
2R(&) 800L	5	250	AC	1	n/a	-	85	Ld-Ld	-	1880	250	n/a	5	n/a	1

2R(&)800L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	1880	250	n/a	5	n/a	1,3
2R(&)800M	5	250	AC	1	n/a	-	85	Ld-Ld	-	1880	250	n/a	5	n/a	1
2R(&)800M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	1880	250	n/a	5	n/a	1,3
2R(@)1200L	5	250	AC	1	n/a	-	85	Ld-Ld	-	2600	250	n/a	3	n/a	1
2R(@)1200L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2600	250	n/a	3	n/a	1,3
2R(@)1200M	5	250	AC	1	n/a	-	85	Ld-Ld	-	2600	250	n/a	3	n/a	1
2R(@)1200M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2600	250	n/a	3	n/a	1,3
2R(@)1400L	5	250	AC	1	n/a	-	85	Ld-Ld	-	2910	250	n/a	5	n/a	1
2R(@)1400L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2910	250	n/a	5	n/a	1,3
2R(@)1400M	5	250	AC	1	n/a	-	85	Ld-Ld	-	2910	250	n/a	5	n/a	1
2R(@)1400M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	2910	250	n/a	5	n/a	1,3
2R(@)1600L	5	250	AC	1	n/a	-	85	Ld-Ld	-	3150	250	n/a	5	n/a	1
2R(@)1600L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	1400	250	n/a	5	n/a	1,3
2R(@)1600M	5	250	AC	1	n/a	-	85	Ld-Ld	-	3150	250	n/a	5	n/a	1
2R(@)1600M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	3150	250	n/a	5	n/a	1,3
2R(@)2700L	5	250	AC	1	n/a	-	85	Ld-Ld	-	5420	250	n/a	3	n/a	1
2R(@)2700L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5420	250	n/a	3	n/a	1,3
2R(@)2700M	5	250	AC	1	n/a	-	85	Ld-Ld	-	5420	250	n/a	3	n/a	1
2R(@)2700M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5420	250	n/a	3	n/a	1,3
2R(@)3000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5030	250	n/a	3	n/a	1,3
2R(@)3000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5030	250	n/a	3	n/a	1,3
2R(@)3500L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5710	250	n/a	3	n/a	1,3
2R(@)3500M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5710	250	n/a	3	n/a	1,3
2R(@)3600L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	6020	250	n/a	3	n/a	1,3
2R(@)3600M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	6020	250	n/a	3	n/a	1,3
2R(@)4000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5880	250	n/a	3	n/a	1,3
2R(@)4000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	5880	250	n/a	3	n/a	1,3
2R(@)5000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	6150	250	n/a	3	n/a	1,3
2R(@)5000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	6150	250	n/a	3	n/a	1,3
2R(@)6000L+	5	250	AC	1	n/a	-	85	Ld-Ld	-	8110	250	n/a	3	n/a	1,3
2R(@)6000M+	5	250	AC	1	n/a	-	85	Ld-Ld	-	8110	250	n/a	3	n/a	1,3

**Notes:**

1. Suitable for Factory wiring only.
2. Suitable for Field and Factory wiring.
3. Series External Impedance required, see Electrical Ratings in the Recognition report.
4. Series External Overcurrent Protection required, see Electrical Ratings in the Recognition report.
5. Body of discrete component metal-oxide varistors (MOVs) flammability:
  - a) Min. V-0 or VTM-0.
  - b) Min. V-1 or VTM-1.
  - c) Complies with IEC 60950-1, Edition 2.2, Annex Q/IEC62368-1 Annex G.8.2 needle flame testing requirements.
  - d) Complies with IEC 60065, Edition 7.2, Annex G.1.1 needle flame testing requirements.

SPDs investigated for Type 1 applications are automatically suitable for Type 2 applications and may be marked for SPD Type 1 and/or Type 2 applications. SPDs only marked "SPD Type 2" are not suitable for Type 1 applications.

Where a minimum ambient temperature is not specified, assume 0°C unless the product is marked otherwise or with an Outdoor use Environmental Rating. See Electrical Equipment for Use in Ordinary Locations (AALZ) for details regarding Environmental Ratings.

# - May be followed by A thru Z or 0 thru 9.

% - All models may be prefix or/and suffix with A thru Z or/and 0 thru 9 or/and any symbol, numbers, letters, except #, (a), +

(\$) - (\$) represents K, H, M, O, P, W, Z, Y or blank

(&) - (&) represents F, S, E, T, A, B, N, C, L or blank

(@) - (@) represents K, H, M, O, P, W, Z, Y, F, S, E, T, A, B, N, C, L or blank

(a) - All models may be prefixed by trademark and/or followed by A thru Z or 0 thru 9.

\* - Each model may be prefixed by "ZOV" and/or suffixed by "X", where "X" may be blank, any character from A to Z or any number from 0 to 9.

+ - May be followed by X, where X= 0 thru 9; all models may be prefix or/and suffix with A thru Z or/and 0 thru 9.



Marking: Company name or trademark, model designation and the Recognized Component Mark for Canada, on the product or on the smallest unit container in which the product is packaged.

Last Updated on 2015-06-09

---

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

◆ 2015 UL LLC

When the UL Leaf Mark is on the product, or when the word "Environment" is included in the UL Mark, please search the [UL Environment database](#) for additional information regarding this product's certification.

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2015 UL LLC".

www.signal.com.pk