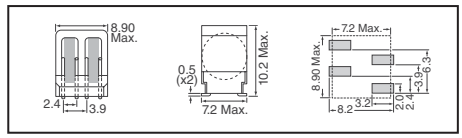
BOURNS® Multi-Fuse

Telecom PTC Resettable Fuses
MF-SD/250 Series

Digi-Reel® RoHS



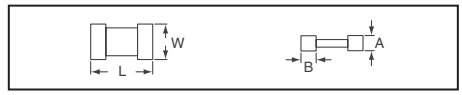
Features: • Tip and ring line protection with two devices in one package • Surface mount device • High voltage surge capabilities • Assists in meeting ITU-T K.20/K.21/K.45 specifications as well as Telcordia GR-1089 intra-building

Applications: Used as a secondary overcurrent protection device in: • Customer Premise Equipment (CPE) • Central Office (CO) • Subscriber Line Interface Cards (SLIC)

Max. Operating Voltage	I Max. Volts (V)	I Max. Amps (A)	Rated Current @ 23°C (Amps) Hold	Rated Current @ 23°C (Amps) Trip	Resistance Ω @ 23°C Min.	Resistance Ω @ 23°C Max.	Nominal Time to Trip Amps @ 23°C	Nominal Time to Trip Seconds @ 23°C	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 100	Digi-Key Part No.	Tape and Reel Pricing 400	Bourns Part No.
60	250	3.0	0.13	0.26	2.0	7.0	1	2.0	MF-SD013/250-2CT-ND	1.40	.91	.70	MF-SD013/250-2TR-ND	248.25	MF-SD013/250-2

ESD Protection ESD Suppressors
MLC and MLU Series

Digi-Reel® RoHS



The ChipGuard® MLU and MLC Series has been specifically designed to protect sensitive electronic components from electrostatic discharge damage. The MLU and MLC family has been designed to protect equipment to IEC61000-4-2, Level 4(±8kV Contact/ ±15kV Air Discharge) ESD specifications targeted for high speed USB 2.0, HDMI, DVI or IEEE1394 applications. The ChipGuard MLU and MLC Series has been manufactured to provide low 0.05pF and 0.5pF capacitance and leakage currents less than 5nA with excellent clamp qualities, making the family almost transparent under normal working conditions.

Specifications: • Typical Clamping Voltage: 25 • Maximum Leakage Current @ Maximum VDC: 5 • Typical Trigger Voltage: 250 • Maximum Response Time: 1nS

Package	Dimensions – mm L	Dimensions – mm W	Dimensions – mm A	Dimensions – mm B
0402	1.00	0.50	0.50	0.25
0603	1.60	0.80	0.50	0.30

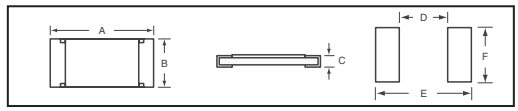
Package	Typ. Cont. Working VDC	Max. Cap. @ 1VRMS 1MHz	Operating Temperature (°C)	Digi-Key Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Digi-Key Part No.	Tape and Reel Qty.	Tape and Reel Pricing	Bourns Part No.
MLC Series											
0402	3.3	0.5	-40 ~ 85	CG0402MLC-3.3LGCT-ND	.26	1.65	12.36	CG0402MLC-3.3LGTR-ND	10,000	99.37/M	CG0402MLC-3.3LG
0603	3.3	0.5	-40 ~ 85	CG0603MLC-3.3LECT-ND	.24	1.52	11.42	CG0603MLC-3.3LETR-ND	5,000	95.14/M	CG0603MLC-3.3LE
0402	5	0.5	-40 ~ 85	CG0402MLC-05LGCT-ND	.26	1.65	12.36	CG0402MLC-05LGTR-ND	10,000	99.37/M	CG0402MLC-05LG
0603	5	0.5	-40 ~ 85	CG0603MLC-05LECT-ND	.24	1.52	11.42	CG0603MLC-05LETR-ND	5,000	95.14/M	CG0603MLC-05LE
0402	12	0.5	-40 ~ 85	CG0402MLC-12LGCT-ND	.26	1.65	12.36	CG0402MLC-12LGTR-ND	10,000	99.37/M	CG0402MLC-12LG
0603	12	0.5	-40 ~ 85	CG0603MLC-12LECT-ND	.24	1.52	11.42	CG0603MLC-12LETR-ND	5,000	95.14/M	CG0603MLC-12LE
MLU Series											
0402	3.3	0.05	-40 ~ 125	CG0402MLU-3.3GCT-ND	.40	2.54	19.03	CG0402MLU-3.3GTR-ND	10,000	153.28/M	CG0402MLU-3.3G
0603	3.3	0.05	-40 ~ 125	CG0603MLU-3.3ECT-ND	.36	2.28	17.12	CG0603MLU-3.3ETR-ND	5,000	142.71/M	CG0603MLU-3.3E
0402	5	0.05	-40 ~ 125	CG0402MLU-05GCT-ND	.40	2.54	19.03	CG0402MLU-05GTR-ND	10,000	153.28/M	CG0402MLU-05G
0603	5	0.05	-40 ~ 125	CG0603MLU-05ECT-ND	.36	2.28	17.12	CG0603MLU-05ETR-ND	5,000	142.71/M	CG0603MLU-05E
0402	12	0.05	-40 ~ 125	CG0402MLU-12GCT-ND	.40	2.54	19.03	CG0402MLU-12GTR-ND	10,000	153.28/M	CG0402MLU-12G
0603	12	0.05	-40 ~ 125	CG0603MLU-12ECT-ND	.36	2.28	17.12	CG0603MLU-12ETR-ND	5,000	142.71/M	CG0603MLU-12E
0402	24	0.05	-40 ~ 125	CG0402MLU-24GCT-ND	.40	2.54	19.03	CG0402MLU-24GTR-ND	10,000	153.28/M	CG0402MLU-24G
0603	24	0.05	-40 ~ 125	CG0603MLU-24ECT-ND	.36	2.28	17.12	CG0603MLU-24ETR-ND	5,000	142.71/M	CG0603MLU-24E

H

BOURNS®

SingleFuse™ Thin Film Chip Fuses

Digi-Reel® RoHS



Features: • Single blow fuse for overcurrent protection • UL Certified • Halogen Free

Amp Rating	Voltage Rating	Dimensions — mm A	Dimensions — mm B	Dimensions — mm C	Dimensions — mm D	Dimensions — mm E	Dimensions — mm F	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 100	Digi-Key Part No.	Tape and Reel Qty.	Tape and Reel Pricing	Bourns Part No.
Fast-Acting Fuses															
SF0402F Series															
0.50	24	1.0	0.52	0.35	0.381	1.55	0.558	SF-0402F050-2CT-ND	.54	.35	.26	SF-0402F050-2TR-ND	10,000	288.29/M	SF-0402F050-2
2.00	24	1.0	0.52	0.35	0.381	1.55	0.558	SF-0402F200-2CT-ND	.54	.35	.26	SF-0402F200-2TR-ND	10,000	288.29/M	SF-0402F200-2
SF0603F Series															
0.50	50	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F050-2CT-ND	.46	.29	.22	SF-0603F050-2TR-ND	5,000	240.24/M	SF-0603F050-2
1.00	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F100-2CT-ND	.46	.29	.22	SF-0603F100-2TR-ND	5,000	240.24/M	SF-0603F100-2
1.50	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F150-2CT-ND	.46	.29	.22	SF-0603F150-2TR-ND	5,000	240.24/M	SF-0603F150-2
2.00	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F200-2CT-ND	.46	.29	.22	SF-0603F200-2TR-ND	5,000	240.24/M	SF-0603F200-2
2.50	24	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F250-2CT-ND	.46	.29	.22	SF-0603F250-2TR-ND	5,000	240.24/M	SF-0603F250-2
3.00	24	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F300-2CT-ND	.46	.29	.22	SF-0603F300-2TR-ND	5,000	240.24/M	SF-0603F300-2
3.15	24	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F315-2CT-ND	.46	.29	.22	SF-0603F315-2TR-ND	5,000	240.24/M	SF-0603F315-2
5.00	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603F500-2CT-ND	.46	.29	.22	SF-0603F500-2TR-ND	5,000	240.24/M	SF-0603F500-2
SF1206F Series															
0.50	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F050-2CT-ND	.52	.33	.25	SF-1206F050-2TR-ND	5,000	272.28/M	SF-1206F050-2
0.80	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F080-2CT-ND	.52	.33	.25	SF-1206F080-2TR-ND	5,000	272.28/M	SF-1206F080-2
1.00	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F100-2CT-ND	.52	.33	.25	SF-1206F100-2TR-ND	5,000	272.28/M	SF-1206F100-2
1.25	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F125-2CT-ND	.52	.33	.25	SF-1206F125-2TR-ND	5,000	272.28/M	SF-1206F125-2
1.50	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F150-2CT-ND	.52	.33	.25	SF-1206F150-2TR-ND	5,000	272.28/M	SF-1206F150-2
2.00	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F200-2CT-ND	.52	.33	.25	SF-1206F200-2TR-ND	5,000	272.28/M	SF-1206F200-2
2.50	32	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F250-2CT-ND	.52	.33	.25	SF-1206F250-2TR-ND	5,000	272.28/M	SF-1206F250-2
3.00	32	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F300-2CT-ND	.64	.38	.27	SF-1206F300-2TR-ND	5,000	193.80/M	SF-1206F300-2
4.00	24	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F400-2CT-ND	.52	.33	.28	SF-1206F400-2TR-ND	5,000	204.21/M	SF-1206F400-2
5.00	24	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F500-2CT-ND	.64	.39	.27	SF-1206F500-2TR-ND	5,000	193.80/M	SF-1206F500-2
7.00	24	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206F700-2CT-ND	.52	.33	.25	SF-1206F700-2TR-ND	5,000	272.28/M	SF-1206F700-2
Slow Blow Fuses															
SF0402S Series															
2.00	24	1.0	0.52	0.35	0.381	1.55	0.558	SF-0402S200-2CT-ND	.58	.37	.28	SF-0402S200-2TR-ND	10,000	288.29/M	SF-0402S200-2
SF0603S Series															
1.25	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603S125-2CT-ND	.49	.31	.24	SF-0603S125-2TR-ND	5,000	256.26/M	SF-0603S125-2
1.60	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603S160-2CT-ND	.49	.31	.24	SF-0603S160-2TR-ND	5,000	256.26/M	SF-0603S160-2
2.00	32	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603S200-2CT-ND	.49	.31	.24	SF-0603S200-2TR-ND	5,000	256.26/M	SF-0603S200-2
2.50	24	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603S250-2CT-ND	.49	.31	.24	SF-0603S250-2TR-ND	5,000	256.26/M	SF-0603S250-2
3.00	24	1.6	0.8	0.45	1.02	2.54	1.09	SF-0603S300-2CT-ND	.49	.31	.24	SF-0603S300-2TR-ND	5,000	256.26/M	SF-0603S300-2
SF1206S Series															
0.50	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S050-2CT-ND	.54	.35	.26	SF-1206S050-2TR-ND	5,000	216.22/M	SF-1206S050-2
1.00	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S100-2CT-ND	.54	.35	.26	SF-1206S100-2TR-ND	5,000	216.22/M	SF-1206S100-2
1.50	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S150-2CT-ND	.54	.35	.26	SF-1206S150-2TR-ND	5,000	216.22/M	SF-1206S150-2
2.00	63	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S200-2CT-ND	.54	.35	.26	SF-1206S200-2TR-ND	5,000	216.22/M	SF-1206S200-2
2.50	32	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S250-2CT-ND	.54	.35	.34	SF-1206S250-2TR-ND	5,000	216.22/M	SF-1206S250-2
3.00	32	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S300-2CT-ND	.54	.35	.26	SF-1206S300-2TR-ND	5,000	216.22/M	SF-1206S300-2
4.00	24	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S400-2CT-ND	.54	.35	.26	SF-1206S400-2TR-ND	5,000	216.22/M	SF-1206S400-2
5.00	24	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S500-2CT-ND	.54	.35	.26	SF-1206S500-2TR-ND	5,000	216.22/M	SF-1206S500-2
7.00	24	3.1	1.55	0.6	1.27	3.81	2.03	SF-1206S700-2CT-ND	.54	.35	.26	SF-1206S700-2TR-ND	5,000	216.22/M	SF-1206S700-2

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

Free shipping on orders over €65! All prices in euro and include duties.