

# LITTELFUSE Silicon Protection Arrays



Transient Protection

Littelfuse

## LITTELFUSE SILICON PROTECTION ARRAYS

RoHS Compliant This product is RoHS compliant.

### Features:

- Low Capacitance
- EFT Protection
- Small Packaging
- ESD Protection
- Low Leakage Current
- ROHS compliant

### General Purpose ESD Protection



MOUSER STOCK NO.	Littelfuse Part No.	Package	V <sub>ESD</sub> (kV)	Channels	IPP	V <sub>rwm</sub> (V)	I Leakage (μA)	C <sub>TYP</sub> (pF)	Price Each			Reel Qty	Price Per Piece
									1	10	100		
<b>SP050xBA SPA™ Series</b>													
576-SP0502BAHTG	SP0502BAHTG	SOT-23-3	30	2	-	5.5	0.1	30	.74	.67	.53	3000	.25
576-SP0504BAHTG	SP0504BAHTG	SOT-23-6	30	4	-	5.5	0.1	30	1.05	.94	.74	3000	.36
576-SP0504BAJTG	SP0504BAJTG	SC-70-5	30	4	-	5.5	0.1	30	1.03	.93	.74	3000	.378
576-SP0505BAHTG	SP0505BAHTG	SOT-23-6	30	5	-	5.5	0.1	30	1.01	.92	.73	3000	.372
576-SP0505BAJTG	SP0505BAJTG	SC-70-6	30	5	-	5.5	0.1	30	1.15	1.05	.83	3000	.423
576-SP0506BAATG	SP0506BAATG	MSOP-8	30	6	-	5.5	0.1	30	1.60	1.44	1.15	4000	.583
<b>SP1000 SPA™ Series</b>													
576-SP1001-02JTG	SP1001-02JTG	SC-70-3	15	2	2	5.5	0.5	8	.35	.325	.27	3000	.131
576-SP1001-04JTG	SP1001-04JTG	SC-70-5	15	4	2	5.5	0.5	8	.50	.46	.38	3000	.18
576-SP1001-04XTG	SP1001-04XTG	SOT-563	15	4	2	5.5	0.5	8	.47	.43	.36	5000	.16
576-SP1001-05JTG	SP1001-05JTG	SC-70-6	15	5	2	5.5	0.5	8	.62	.57	.45	3000	.215
576-SP1001-05XTG	SP1001-05XTG	SOT-563	15	5	2	5.5	0.5	8	.65	.58	.46	5000	.202
576-SP1002-01JTG	SP1002-01JTG	SC-70-3	8	1	2	6	0.5	5	.45	.37	.25	3000	.11
576-SP1002-02JTG	SP1002-02JTG	SC-70-5	8	2	2	6	0.5	5	.40	.35	.27	3000	.147
576-SP1003-01DTG	SP1003-01DTG	SOD-723	30	1	7	5	0.1	30	.35	.325	.27	8000	.11
576-SP1003-01ETG	SP1003-01ETG	SOD-882	30	1	7	5	0.1	30	.45	.37	.25	8000	.09
576-SP1004-04VTG	SP1004-04VTG	SC-70-3	8	4	2	6	0.1	5	.56	.51	.43	8000	.19
576-SP1005-01WTG	SP1005-01WTG	0201(FC)	30	1	10	6	0.1	30	.40	.34	.23	10000	.074
576-SP1006-01UTG	SP1006-01UTG	μDFN-2	30	1	5	6	0.1	25	.40	.34	.23	10000	.074
576-SP1007-01WTG	SP1007-01WTG	0201(FC)	8	1	2	6	0.1	5	.40	.34	.23	10000	.074
576-SP1008-01WTG	SP1008-01WTG	0201(FC)	15	1	2.5	6	0.1	6	.40	.34	.23	10000	.10
576-SP1010-04UTG	SP1010-04UTG	μDFN-6	8	4	1	6	1	3.5	.48	.44	.371	3000	.175
576-SP1011-04UTG	SP1011-04UTG	μDFN-6	15	4	2	6	1	7	.56	.51	.43	3000	.205

### General Purpose ESD Protection, SP720 SPA™ Series

MOUSER STOCK NO.	Littelfuse Part No.	Package	V <sub>ESD</sub> (kV)	Channels	IPP	V <sub>rwm</sub> (V)	I Leakage (μA)	C <sub>TYP</sub> (pF)	Price Each			
									1	10	100	250
576-SP720ABG	SP720ABG	SOIC-16	4	14	2	30	0.02	3	3.10	2.77	2.27	2.04
576-SP720APP	SP720APP	SOIC-16	4	14	2	30	0.02	3	3.10	2.77	2.27	2.04
576-SP721ABG	SP721ABG	SOIC-8	4	6	2	30	0.02	3	2.40	2.30	1.70	1.50
576-SP721APP	SP721APP	PDIP-8	4	6	2	30	0.02	3	2.50	2.30	1.70	1.50
576-SP723ABG	SP723ABG	SOIC-8	8	6	4	30	0.02	5	2.86	2.55	2.09	1.89

### Low Capacitance ESD Protection



MOUSER STOCK NO.	Littelfuse Part No.	Package	V <sub>ESD</sub> (kV)	Channels	IPP	V <sub>rwm</sub> (V)	I Leakage (μA)	C <sub>TYP</sub> (pF)	Price Each			Reel Qty	Price Per Piece
									1	10	100		
<b>SP3000 SPA™ Series</b>													
576-SP3001-04JTG	SP3001-04JTG	SC-70-6	8	4	2.5	6	0.5	0.65	.78	.69	.55	3000	.26
576-SP3002-04HTG	SP3002-04HTG	SOT-23-6	12	4	4.5	6	0.5	0.85	.73	.66	.52	3000	.25
576-SP3002-04JTG	SP3002-04JTG	SC-70-6	12	4	4.5	6	0.5	0.85	.75	.68	.54	3000	.26
576-SP3002-04UTG	SP3002-04UTG	μDFN-6	12	4	4.5	6	0.5	0.85	.78	.69	.55	3000	.26
576-SP3003-02JTG	SP3003-02JTG	SC-70-5	8	2	2.5	6	0.5	0.65	.93	.85	.71	3000	.339
576-SP3003-02XTG	SP3003-02XTG	SC-70-5	8	2	2.5	6	0.5	0.65	1.01	.92	.73	5000	.353
576-SP3003-04ATG	SP3003-04ATG	MSOP-10	8	4	2.5	6	0.5	0.65	1.57	1.43	1.13	4000	.578
576-SP3003-04JTG	SP3003-04JTG	SC-70-6	8	4	2.5	6	0.5	0.65	.78	.69	.55	3000	.26
576-SP3003-04XTG	SP3003-04XTG	SOT-563	8	4	2.5	6	0.5	0.65	.80	.70	.56	5000	.253
576-SP3003-08ATG	SP3003-08ATG	MSOP-10	8	8	2.5	6	0.5	0.65	1.20	1.09	.87	4000	.442
576-SP3010-04UTG	SP3010-04UTG	μDFN-10	8	4	3	6	0.5	0.45	.90	.82	.69	3000	.347
576-SP3011-06UTG	SP3011-06UTG	μDFN-14	8	6	3	6	0.5	0.4	1.13	1.02	.81	3000	.42
576-SP3012-04UTG	SP3012-04UTG	μDFN-10	12	4	4	5	1.5	0.5	.75	.69	.58	3000	.29
576-SP3021-01ETG	SP3021-01ETG	SOD882	8	1	2.0	5.0	1	0.5	.50	.39	.27	3000	.117
576-SP3031-01ETG	SP3031-01ETG	SOD882	10	1	5.0	5.0	1	0.8	.47	.36	.25	3000	.109

### Lightning Surge Protection



MOUSER STOCK NO.	Littelfuse Part No.	Package	V <sub>ESD</sub> (kV)	Channels	IPP	V <sub>rwm</sub> (V)	I Leakage (μA)	C <sub>TYP</sub> (pF)	Price Each			Reel Qty	Price Per Piece
									1	10	100		
<b>SP3050 SPA™ Series</b>													
576-SP3050-04HTG	SP3050-04HTG	SOT-23-6	20	4	10	6	0.5	2.0	.97	.86	.68	3000	.378
<b>SP03 SPA™ Series</b>													
576-SP03-3.3BTG	SP03-3.3BTG	SOIC-8	30	2	150	3.3	1	16	2.45	2.10	1.71	2500	.94
576-SP03-6BTG	SP03-6BTG	SOIC-8	30	2	150	6	25	16	2.10	1.80	1.47	2500	.81
<b>SP03A-3.3A SPA™ Series</b>													
576-SP03A-3.3BTG	SP03A-3.3BTG	SOIC-8	30	2	150	3.3	1	9	2.45	2.10	1.71	2500	.94
<b>SP4060 SPA™ Series</b>													
576-SP4060-08ATG	SP4060-08ATG	MSOP-10	30	8	20	2.5	1	4.4	1.48	1.32	1.05	3000	.793
<b>SPLV2.8-4 SPA™ Series</b>													
576-SPLV2.8-4BTG	SPLV2.8-4BTG	SOIC-8	30	4	40	2.8	1	3.8	1.79	1.65	1.23	3000	.913
576-SPLV2.8HTG	SPLV2.8HTG	SOT-23-3	30	1	40	2.8	1	3.8	1.10	1.00	.79	3000	.41
<b>SP4040 SPA™ Series</b>													
576-SP4040-02BTG	SP4040-02BTG	SOIC-8	30	2	20	3.3	1	5	1.96	1.68	1.37	2500	.75
<b>SP4061 SPA™ Series</b>													
576-SP4061-04UTG	SP4061-04UTG	μDFN-10	30	4	20	2.5	0.5	3.5	1.36	1.25	.99	3000	.50
<b>SP4062 SPA™ Series</b>													
576-SP4062-04UTG	SP4062-04UTG	μDFN-10	30	4	20	3.3	0.5	3.5	1.29	1.19	.94	3000	.47

### ESD and EMI Filter Devices

MOUSER STOCK NO.	Littelfuse Part No.	Package	V <sub>ESD</sub> (kV)	Channels	Polarity	V <sub>rwm</sub> (V)	I Leakage (μA)	C <sub>TYP</sub> (pF)	Price Each			Reel Qty	Price Per Piece
									1	10	100		
<b>SP6001 SPA™ Series</b>													
576-SP6001-04UTG-1	SP6001-04UTG-1	μDFN-8	30	4	-	6	1	12	.83	.77	.642	3000	.304
576-SP6001-06UTG-1	SP6001-06UTG-1	μDFN-12	30	6	-	6	1	12	1.03	.84	.80	3000	.378
<b>SP6002 SPA™ Series</b>													
576-SP6002-04UTG-1	SP6002-04UTG-1	μDFN-8	30	4	-	6	1	15	.83	.77	.642	3000	.304
576-SP6002-06UTG-1	SP6002-06UTG-1	μDFN-12	30	6	-	6	1	15	1.03	.84	.80	3000	.378

