



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
Chatsworth, CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

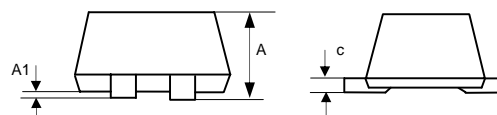
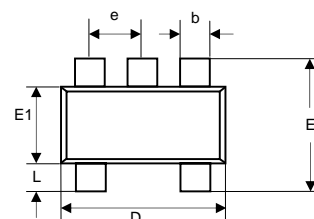
ESDLC5V0L4

Features

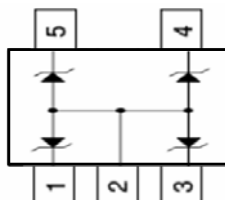
- Four Separate Unidirectional Configurations for Protection
- Excellent clamping capability
- Low Leakage Current $<1\mu\text{A}$ @ 5 Volts
- Small Package
- Low Capacitance
- Complies to USB 1.1 Low Speed & Full Speed Specifications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

5 Volts ESD Protection Device

SOT-553



Pin Configuration



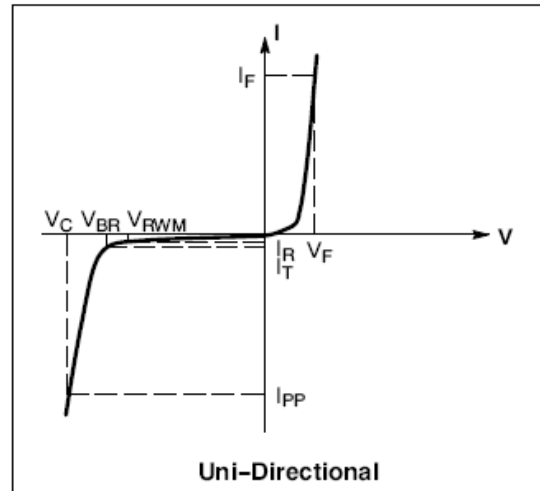
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.021	.024	.525	.60
A1	.00	.002	.00	.05
e	.018	.022	.45	.55
c	.004	.006	.09	.16
D	.059	.067	1.5	1.7
b	.007	.011	.17	.27
E1	.043	.051	1.1	1.3
E	.059	.067	1.5	1.7
L	.004	.012	.100	.300

ESDLC5V0L4



ELECTRICAL CHARACTERISTICS (Ta = 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current



Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Peak Power Dissipation @ 8 X 20 μ s @ T _A = 25°C (Note 1)	P_{pk}	20	W
Steady State Power -- 1 Diode (Note 2)	P_D	150	mW
Thermal Resistance Junction-to-Ambient Above 25 °C, derate	$R_{\theta JA}$	833	°C/W
Maximum Junction Temperature	T_{jmax}	150	°C
Operating Junction and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C
Lead Solder Temperature (10 Seconds Duration)	T_L	260	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C unless otherwise noted, V_F = 0.9 V Max. @ I_F = 10mA for all types)

Device	Device Marking	Breakdown voltage V_{BR} @ 1mA(Volts)			Leakage current I_{RM} @ V_{RM}		V_C Max @ I_{PP}		Capacitance @ $V_R=0V$ Bias (pF) (Note 3)	Capacitance @ $V_R=3V$ Bias (pF) (Note 3)
		Min	Mon	Max	V_{RWM}	I_{RWM} (μ A)	V_C (V)	I_{PP} (A)	Max	Max
ESDLC5V0L4	5H	6.0	6.5	7.2	5.0	1.0	11	1.6	14	11.5

1. Non-repetitive current per Figure 1.
2. Only 1 diode under power. For all 4 diodes under power, P_D will be 25%. Mounted on FR-4 board with min pad.
3. Capacitance of one diode at $f = 1MHz$, $T_a = 25^\circ C$



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com