



Micro Commercial Components



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

ESDLC5V0DFN10

5 Volts ESD Protection Device

Features

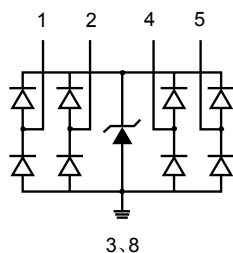
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Small package saves board space
- Protects four(4) I/O lines
- Low clamping voltage
- 150W peak pulse power (tp=8/20us)
- Low capacitance
- Can handle multiple ESD strikes

Maximum Ratings

- Operating Junction & Storage Temperature: -55°C to +150°C

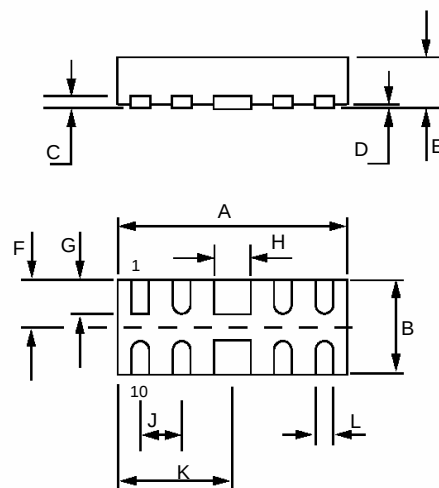
Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		± 15 ± 8	KV
IEC61000-4-5 (lightning): @ 8/20us		24	A
Peak Pulse Power: @ 8/20us	Ppp	150	W

Pin Configuration



Pin	Identification
1,2,4,5	Input lines
6,7,9,10	Output Lines (No Internal Connection)
3,8	Ground

DFN-10



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.0094	0.102	2.40	2.60	
B	.035	.043	0.90	1.10	
C	.005		0.13		
D	.000	.002	0.00	0.05	
E	.020	.026	0.50	0.65	
F	.017	.022	0.45	0.55	
G	.012	.017	0.30	0.425	
H	.014	.018	0.35	0.45	
J	.020BSC		0.5BSC		
K	.047	.056	1.20	1.30	
L	.006	.010	0.15	0.25	

Electrical characteristics per line@25°C(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	V_{RWM}				5	V
Reverse Breakdown voltage	V_{BR}	$I_t = 1mA$	6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$ $T=25^{\circ}C$			1	μA
Junction Capacitance	C_j	$V_R=0V$ $f = 1MHz$		0.5	0.9	pF
Clamping voltage	V_C	$I_{pp}=1A$			12.5	V
Clamping voltage	V_C	$I_{pp}=5A$			28.0	V

Typical Characteristics

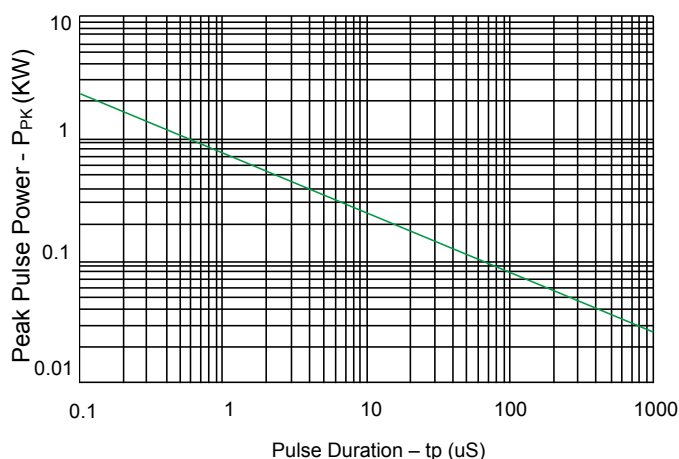


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

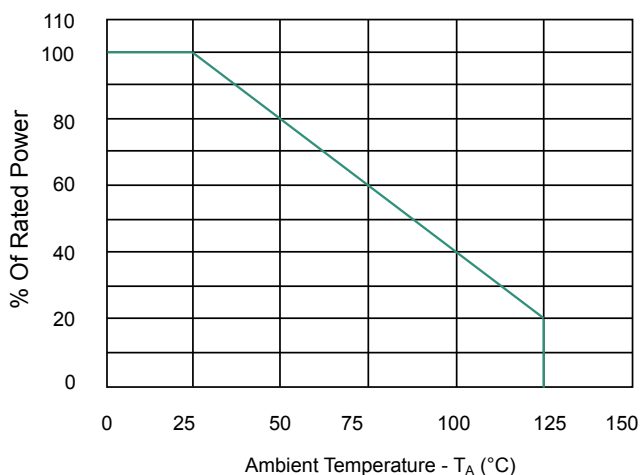


Fig2. Power Derating Curve

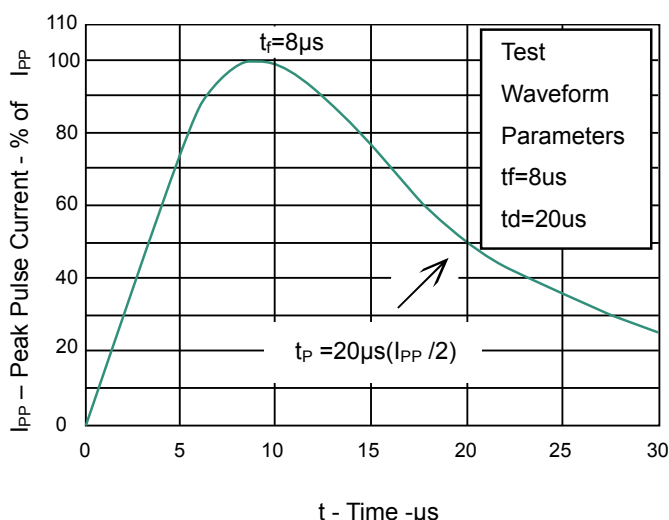


Fig 3. Pulse Waveform

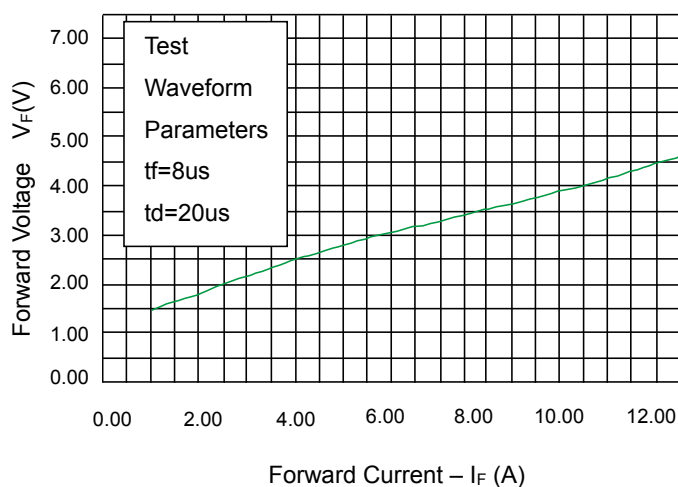


Fig.4 Forward Voltage vs. Forward Current



TM

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