

ESD883UC5VU

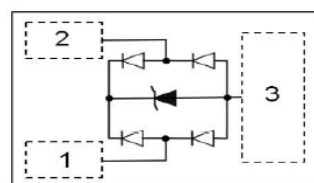
ESD883UC5VU Ultra Low Capacitance TVS/ESD Protection Diode

General description

Silicon Protection Diode in a SOT-883 (DFN1006-3L) Package.

FEATURES

- 60 Watt peak pulse power ($t_p=8/20$)
- Low Leakage Current
- Low clamping voltage
- Ultra Low capacitance ($C_j=0.2$ pF typ.)
- Protection two data line
- IEC 61000-4-2 8Kv Contact /15Kv air.
- IEC 61000-4-4 EFT 40A(5/50nS)
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish



Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
P_{pp}	Peak pulse power	60	W
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_J	Junction Temperature	-55 to +125	°C
ESD	IEC61000-4-2 Air Discharge	20	KV
	Contact Discharge	20	
EFT	IEC61000-4-4	40	A

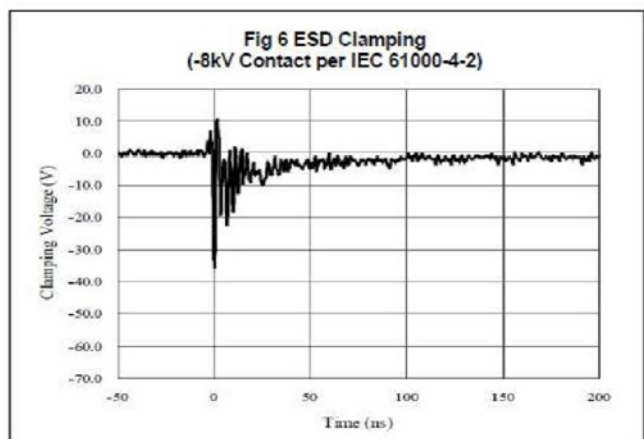
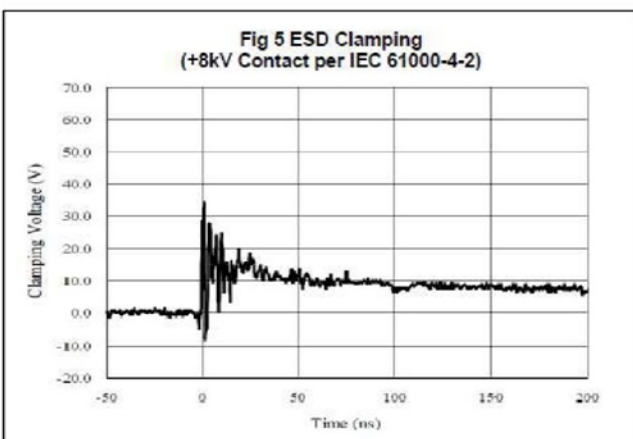
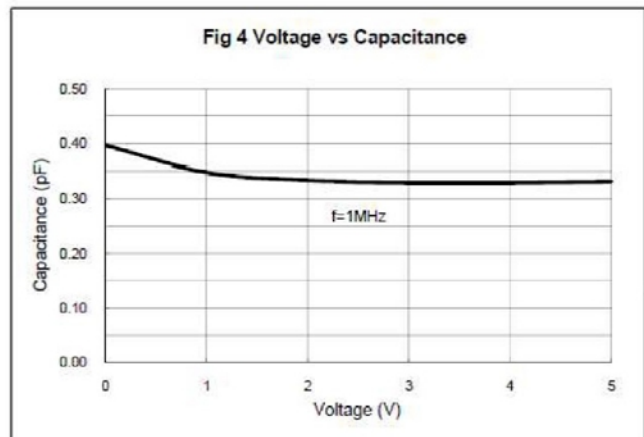
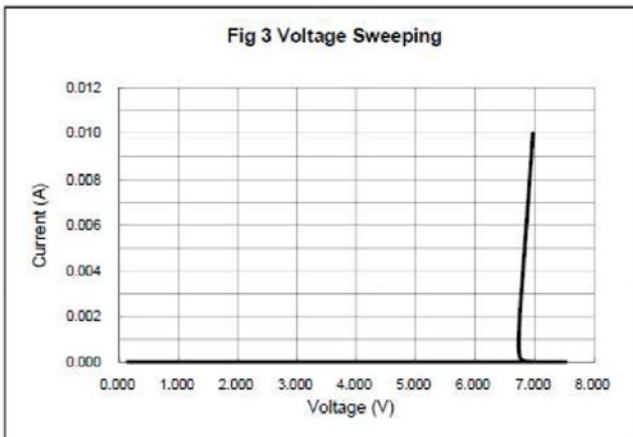
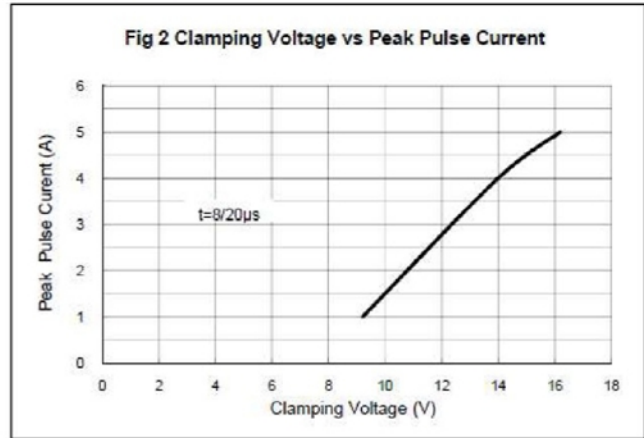
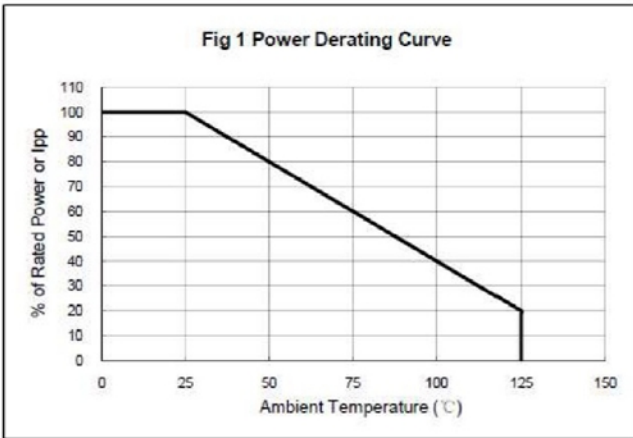
Device Marking:

Device Type	Marking	Shipping
ESD883UC5VU	52L or L	10,000/Reel

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$)

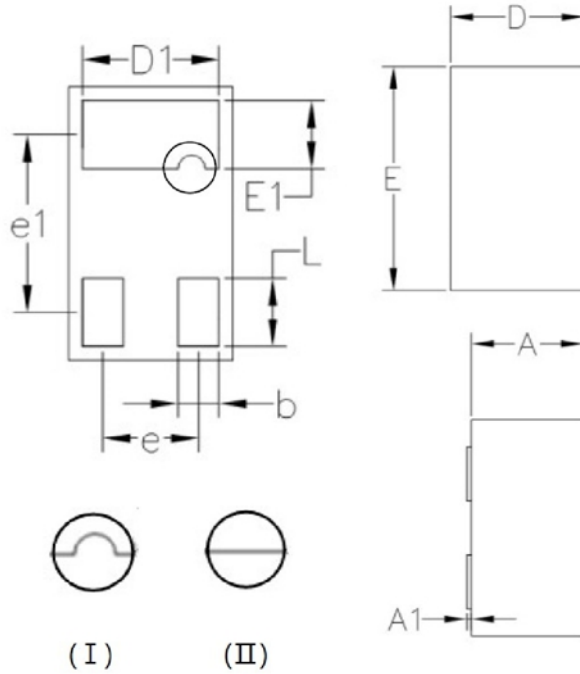
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage	I/O to GND			5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$ Between I/O and GND	6.0			V
I_R	Reverse Leakage Current	$V_{RWM} = 5\text{V}$ Between I/O and GND			100	nA
V_C	Clamping Voltage	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$ Between I/O and GND			10	V
		$I_{PP} = 4\text{A}$, $t_p = 8/20\mu\text{s}$ Between I/O and GND			15	V
V_F	Forward Voltage	$I_T = 10\text{mA}$ Between I/O and GND			1.2	V
C_T	Total Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$ Between I/O and GND		0.4	0.6	pF
		$V_R = 0\text{V}$, $f = 1\text{MHz}$ Between I/O and I/O		0.2	0.3	pF

ELECTRICAL CHARACTERISTICS CURVE



ESD883UC5VU

SOT-883(DFN1006-3L) PACKAGE OUTLINE DIMENSIONS



SYMBOL	DIMENSIONS IN MM		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0.00	--	0.05
D	0.55	0.60	0.65
E	0.95	1.00	1.05
D1	0.45	0.50	0.55
E1	0.20	0.25	0.30
L	0.20	0.25	0.30
b	0.10	0.15	0.20
e	0.35BSC		
e1	0.65BSC		

Important Notice and Disclaimer

DOESHARE has used reasonable care in preparing the information included in this document, but DOESHARE does not warrant that such information is error free. DOESHARE assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.

DOESHARE no warranty, representation or guarantee regarding the documents, circuits and products specification, DOESHARE reservation rights to make changes for any documents, products, circuits and specifications at any time without notice.

Purchasers are solely responsible for the choice, selection and use of the DOESHARE products and services described herein, and DOESHARE assumes no liability whatsoever relating to the choice, selection or use of the products and services described herein.

No license, express or implied, by implication or otherwise under any intellectual property rights of DOESHARE.

Resale of DOESHARE products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by DOESHARE for the DOESHARE product or service described herein and shall not create or extend in any manner whatsoever, any liability of DOESHARE.