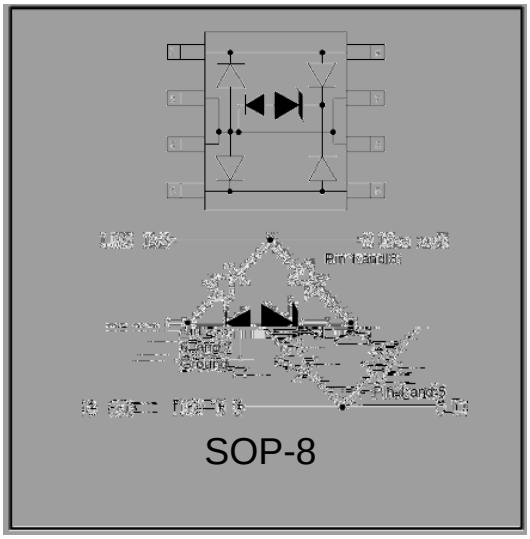
LC03-3.3

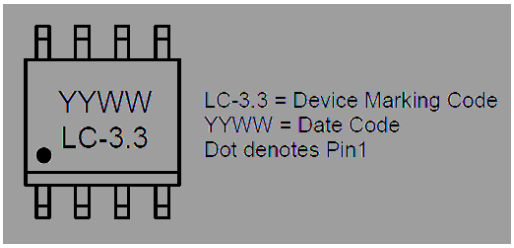
RoHS
COMPLIANT

ESD Protection Diode



Features

- ●Protects two lines in common and differential mode
- ●Ultra low leakage: nA level
- ●Low operating voltage: 3.3V
- ●Moisture Sensitivity: Level 3 per J-STD-020
- ●JEDEC SOP-8 package
- ● Marking:



■**Maximum Ratings**(Ta=25°C unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNIT
Operating Temperature Range	T_J	-55 to +125	
Storage Temperature Range	T_{STG}	-55 to +150	
IEC61000-4-2(ESD)Air	V_{ESD} [1]	±30	KV
IEC61000-4-2(ESD)Contact		±30	KV
Peak Pulse Power	P_{PP} [2]	1800	W
Peak Pulse Current	I_{PP} [2]	100	A

(1).Device stressed with ten non-repetitive ESD pulses.
(2).Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5.

■Electrical Characteristics T_a=25 Unless otherwise specified

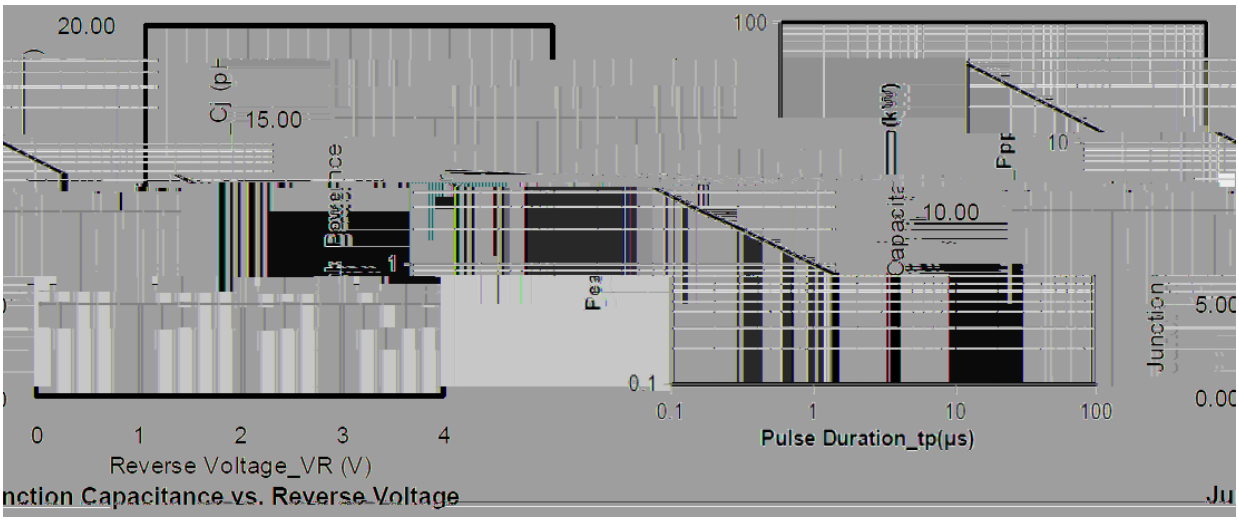
PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse Working Voltage	V_{RWM} [1]	V				3.3
Reverse Leakage Current	I_R	uA	V_{RWM}=3.3V			1.0
Punch-Through Voltage	VPT	V	I_T=2uA	3.5		
Snap-Back Voltage	VSB	V	IT = 50mA	2.8		
Clamping Voltage	V_C [2]	V	I_{PP}=50A any I/O pin to ground [3]			11
Clamping Voltage	V_C [2]	V	I_{PP}=50A between I/O pins [3]			13
Clamping Voltage	V_C [2]	V	I_{PP}=100A any I/O pin to ground [3]			15
Clamping Voltage	V_C [2]	V	I_{PP}=100A between I/O pins [3]			18
Junction Capacitance	C_J	pF	V_R=0V,f=1MHz,between I/O pins and ground [3]		16	25
Junction Capacitance	C_J	pF	V_R=0V,f=1MHz,between I/O pins		8	12

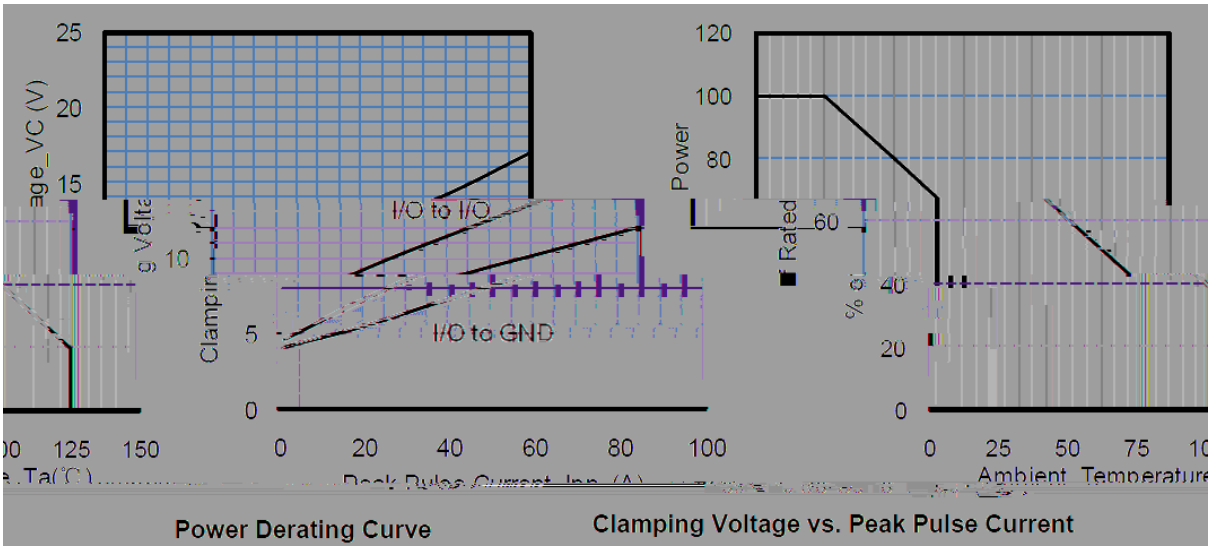
(1).Other voltages available upon request.
(2).Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5
(3).I/O pins are Pin 1,4,5 and 8

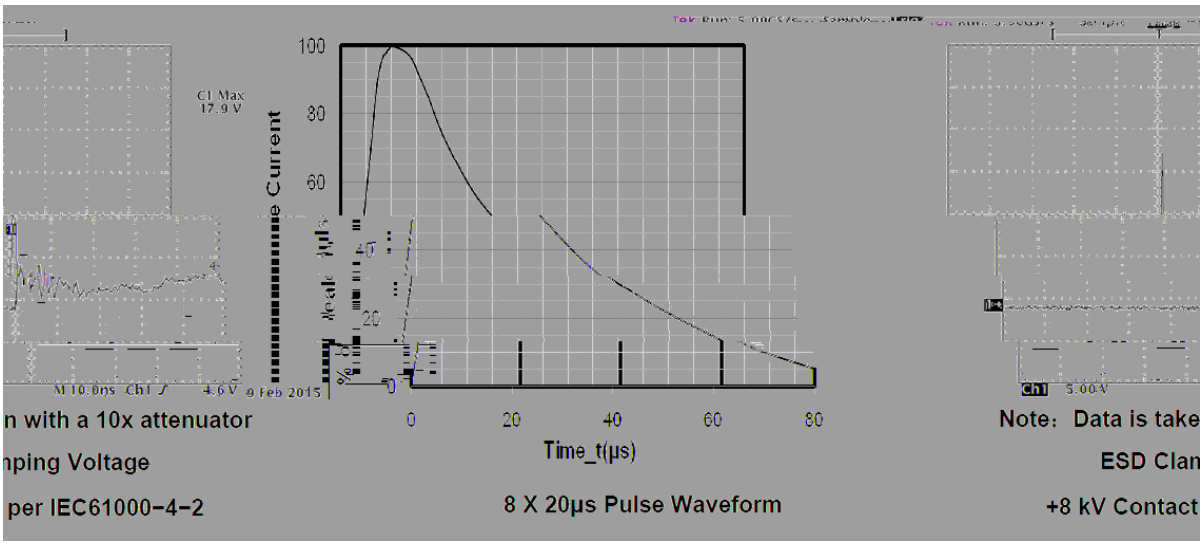
■Thermal Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	LC03-3.3
Thermal Resistance(Typical)	$R_{\theta J-A}$	/W	184
	$R_{\theta J-C}$	/W	74

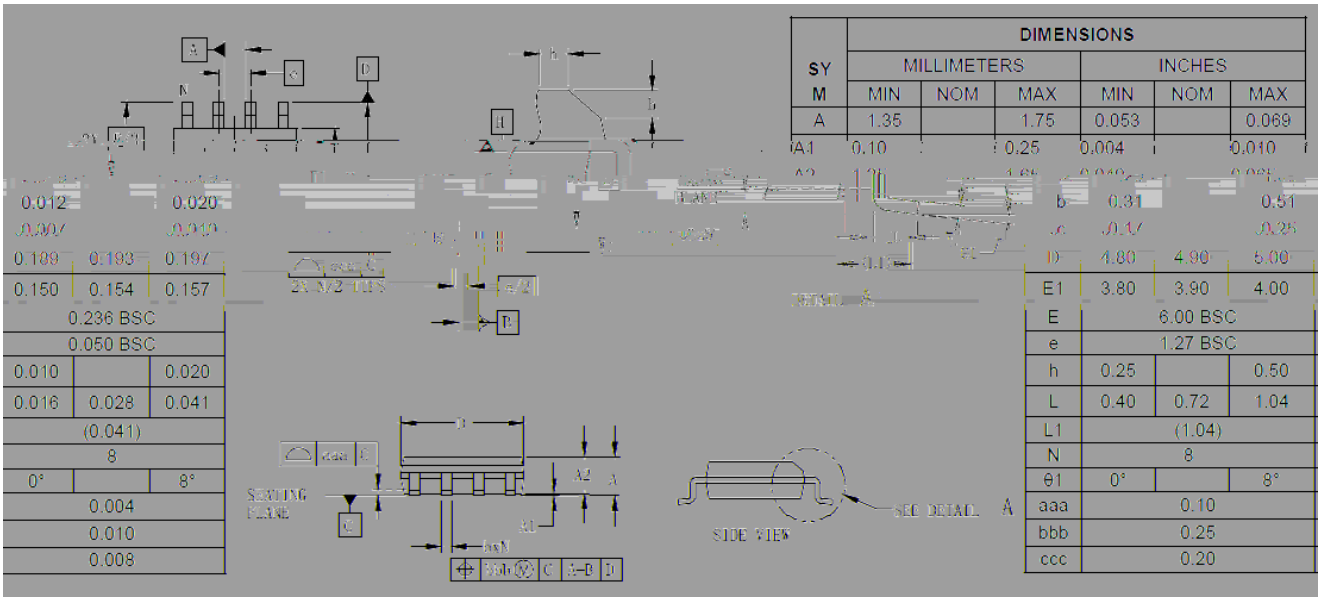
■ Characteristics (Typical)







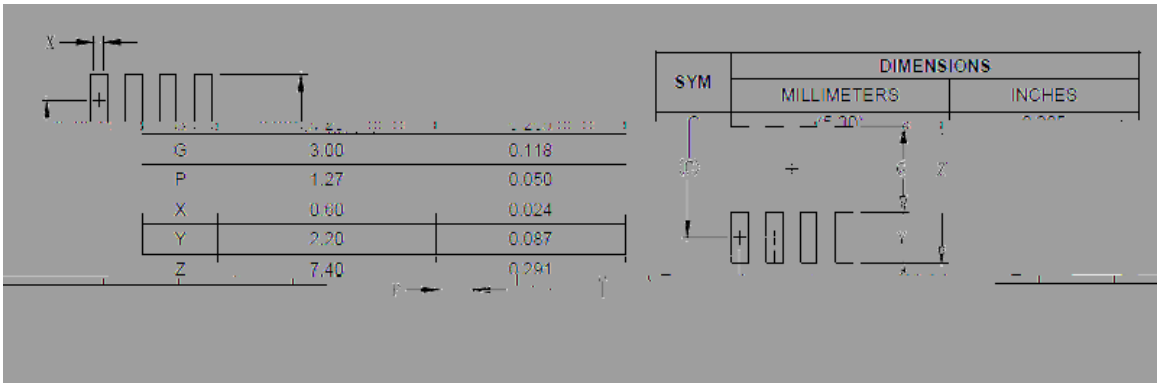
■ Outline Dimensions



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.35		1.75	0.053		0.069
A1	0.10		0.25	0.004		0.010
b	0.31		0.51			
c						
D	4.80	4.90	5.00			
E1	3.80	3.90	4.00			
E	6.00 BSC					
e	1.27 BSC					
h	0.25		0.50			
L	0.40	0.72	1.04			
L1	(1.04)					
N	8					
θ1	0°		8°			
aaa	0.10					
bbb	0.25					
ccc	0.20					

0.012		0.020
0.189	0.193	0.197
0.150	0.154	0.157
0.236 BSC		
0.050 BSC		
0.010		0.020
0.016	0.028	0.041
(0.041)		
8		
0°		8°
0.004		
0.010		
0.008		

■ Soldering Footprint



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