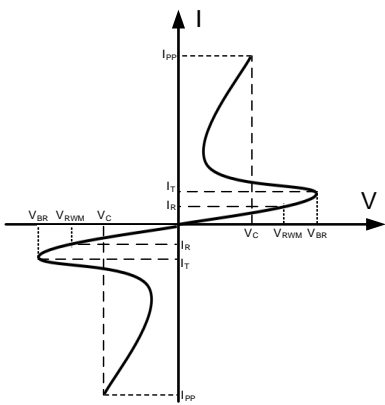


Absolute Maximum Rating

Symbol	Parameter	Value	Units
I_{PP}	Peak Pulse Current (8/20 μ s)	5	A
P_{PK}	Peak Pulse Power (8/20 μ s)	40	W
V_{ESD}	ESD per IEC61000-4-2 (Air) ESD per IEC61000-4-2 (Contact)	± 15 ± 15	kV
T_{OPT}	Operating Temperature	-55/+125	$^{\circ}$ C
T_{STG}	Storage Temperature	-55/+150	$^{\circ}$ C

Electrical Characteristics (T = 25 $^{\circ}$ C)

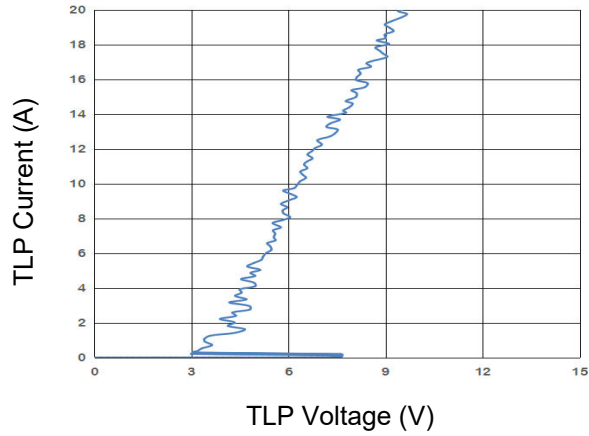
Symbol	Parameter	Diagram
V_{RWM}	Nominal Reverse Working Voltage	
I_R	Reverse Leakage Current @ V_{RWM}	
V_{BR}	Reverse Breakdown Voltage @ I_T	
I_T	Test Current for Reverse Breakdown	
V_C	Clamping Voltage @ I_{PP}	
I_{PP}	Maximum Peak Pulse Current	
C_{ESD}	Parasitic Capacitance	

Symbol	Test Condition	Minimum	Typical	Maximum	Units
V_{RWM}				3.3	V
I_R	$V_{RWM} = 3.3V, T = 25^{\circ}C$		0.1	1.0	μ A
V_{BR}	$I_T = 1mA$	5.0	6.0		V
V_C	$I_{PP} = 5A, t_p = 8/20\mu s$		5.0		V
V_C	$I_{PP} = 8.0A, t_p = 100ns^{(1)}$		5.80		V
	$I_{PP} = 16.0A, t_p = 100ns^{(1)}$		8.00		V
R_{dyn}	$I_{PP} = 12.0A, t_p = 100ns^{(1)}$		0.27		Ω
C_{ESD}	$V_R = 0V, f = 1MHz$		0.40		pF

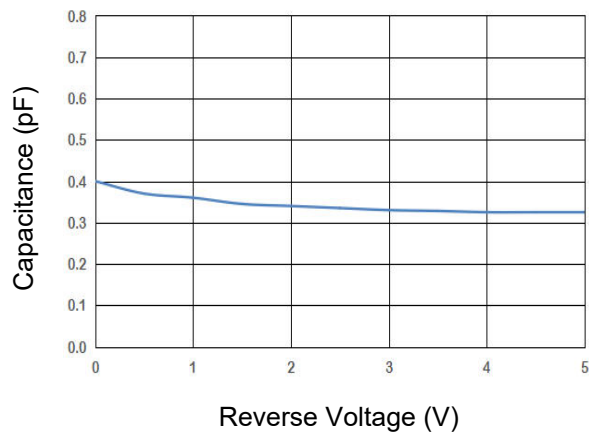
Notes:(1)Measurements performed using a 100ns Transmission Line Pulse(TLP) system.

Typical Performance Characteristics

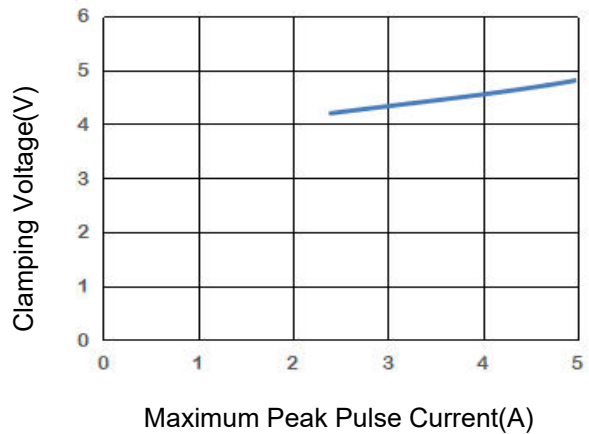
TLP Measurement of I/O to I/O



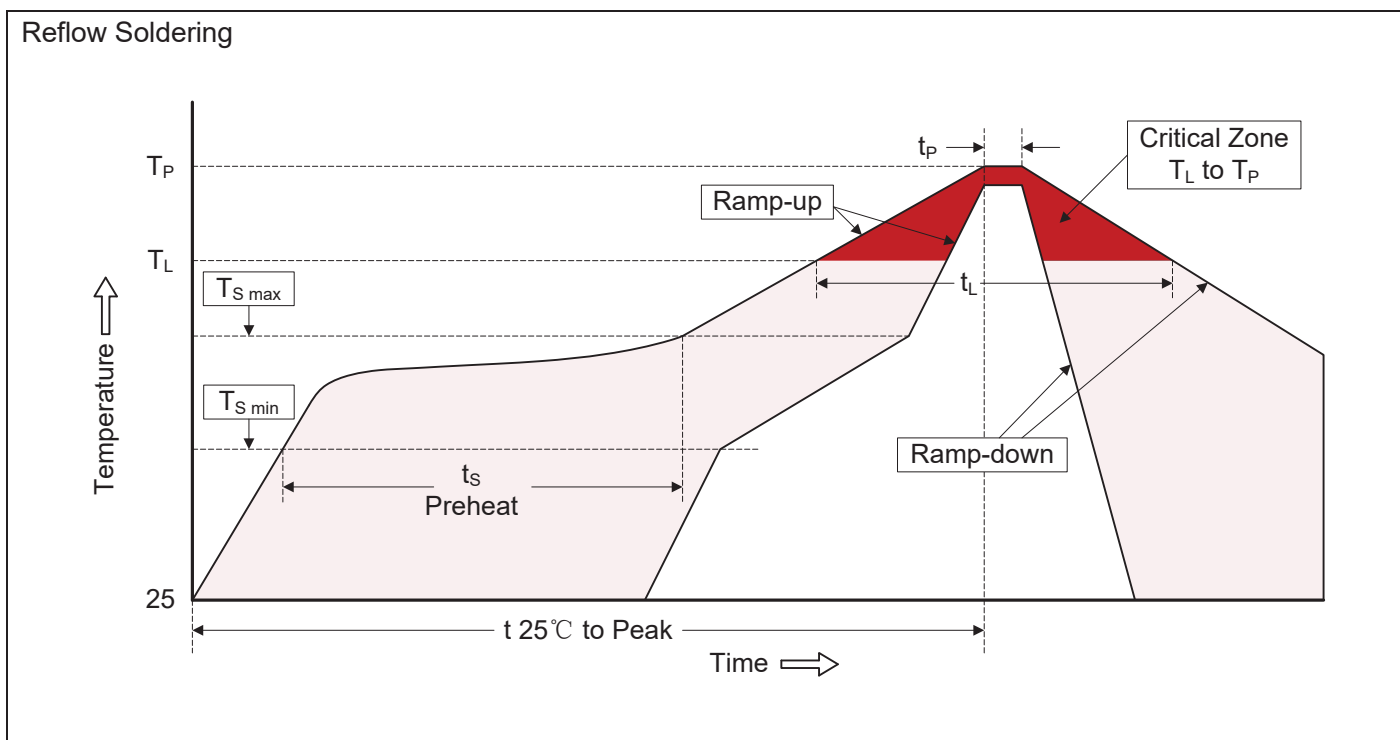
Capacitance vs Reverse Voltage I/O to I/O



8/20us Current I/O to I/O



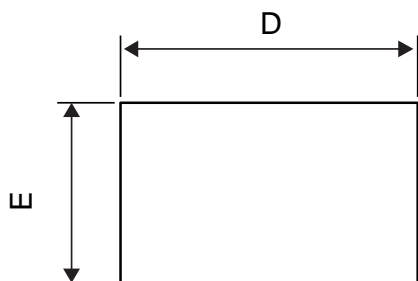
Recommended Soldering Conditions



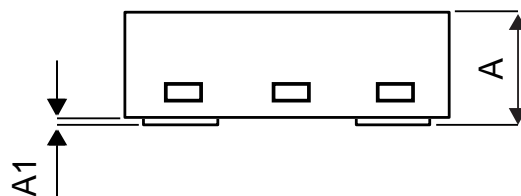
Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (t_s)	150°C 200°C 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	217°C 60-150 seconds
Peak Temperature (T_P)	260°C
Time within 5°C of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

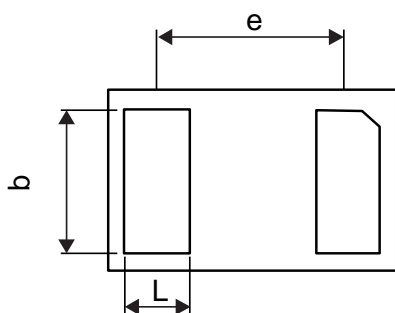
Package Outline, DFN1610-2L



Top View



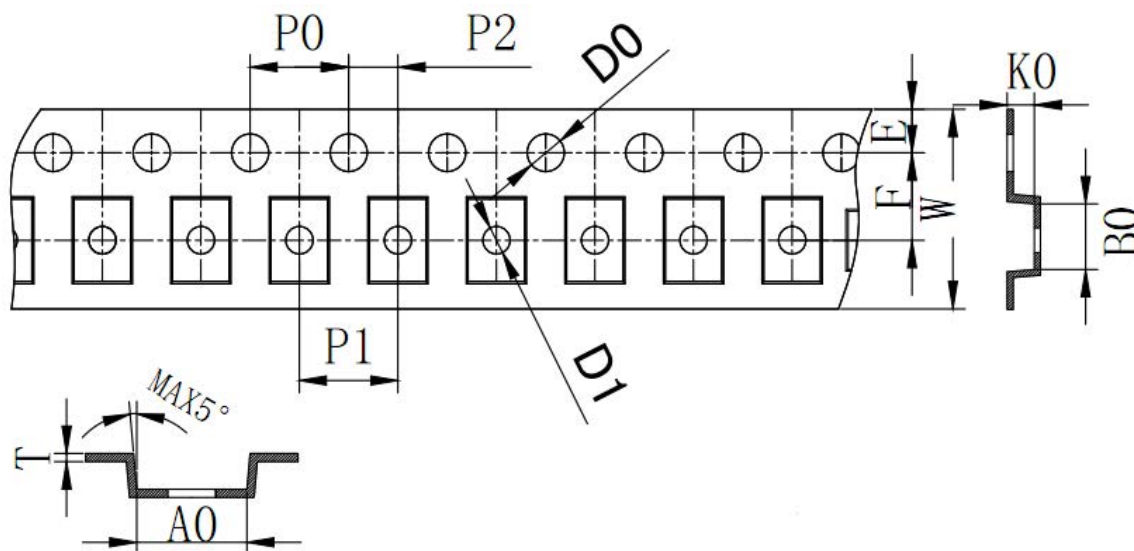
Side View



Bottom View

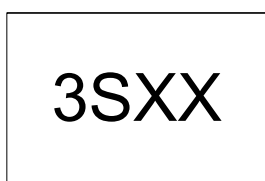
Symbol	Dimension In Millimeters			Dimension In Inches		
	Normal	Min	Max	Normal	Min	Max
A	0.550	0.500	0.600	0.022	0.020	0.024
A1	0.000	--	0.050	0.000	--	0.002
D	1.600	1.550	1.650	0.064	0.062	0.066
E	1.000	0.950	1.050	0.040	0.038	0.042
b	0.800	0.750	0.850	0.032	0.030	0.034
L	0.400	0.350	0.450	0.016	0.014	0.018
e	1.100 BSC			0.044 BSC		

Tape and Reel Specification



SYMBOL	A0	B0	K0	P0	P1	P2
SPEC	1.15±0.05	1.80±0.05	0.63±0.05	4.00±0.10	2.00±0.10	2.00±0.05
SYMBOL	T	E	F	D0	D1	W
SPEC	0.20±0.05	1.75±0.10	3.50±0.05	1.55±0.05	0.60 ^{+0.10} ₋₀	8.00 ^{+0.30} _{-0.10}

Marking Codes



Note:

- (1) "3S" is part number, fixed.
- (2) "XX" is the identification number.

Ordering Information

Part Number	Working Voltage	Quantity Per Reel	Reel Size
TT0321SDX	3.3V	3,000	7 Inch

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[P6KE13CA](#) [P6KE43CA](#) [P6KE6.8CA](#) [P6KE8.2](#) [P6SMBJ20CA](#) [JANTX1N6072A](#) [SR2835ESKG](#) [SA90CA](#)