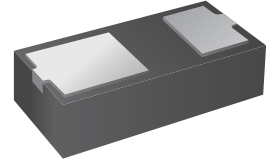


Schottky Barrier Diode

Features

- Low Forward Voltage Drop
- Extremely Small DFN1608-2L Package
- Surface Device Type Mounting
- Green EMC
- Band Indicates Cathode
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case:DFN1608-2L
- Polarity: Color band denotes cathode end

Application

- Low voltage rectification
- Reverse polarity protection
- Low power consumption applications

Ordering Information

Part Number	Marking	Shipping	Reel
LT1040FC-TR3	X	3000PCS Tape&Reel	7 inches

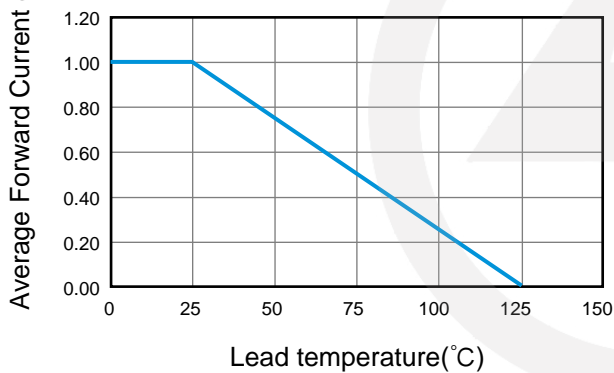
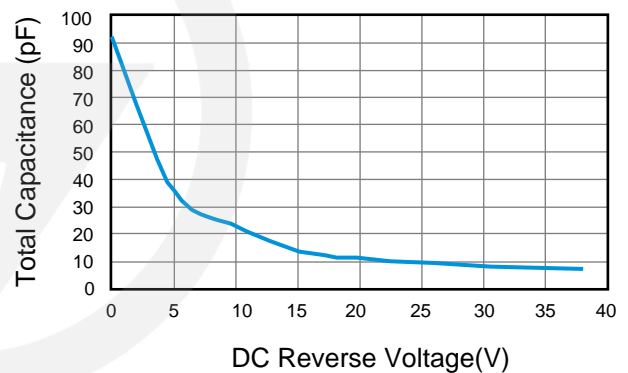
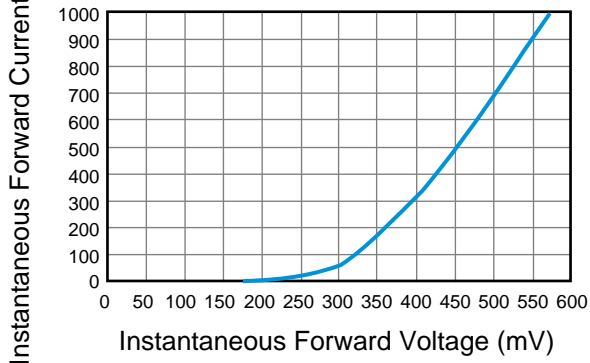
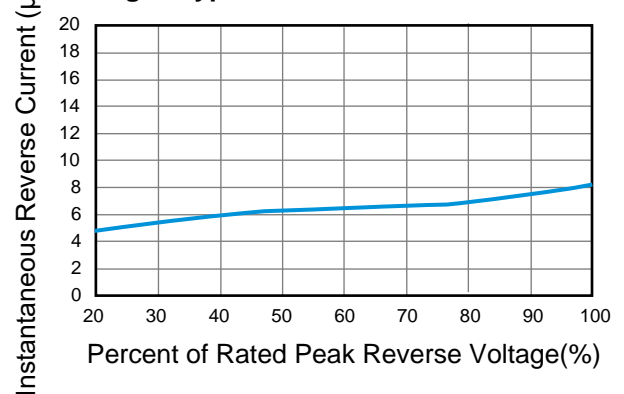
Maximum Rating(Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V_{RRM}	Maximum repetitive reverse voltage	40	V
V_R	Maximum DC blocking reverse voltage	40	V
$I_{F(AV)}$	Average Forward Current	1	A
I_{FSM}	Peak Forward Surge Current (At 8.3ms single half sine-wave)	5	A
T_J	Operating Junction Temperature	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

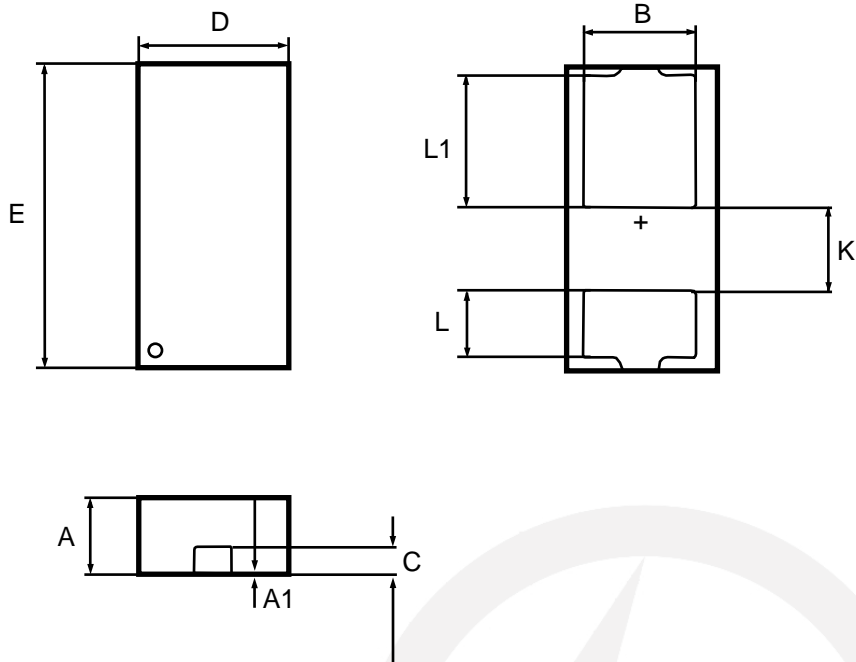
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage at $I_R=100\mu A$	V_{BR}	40			V
Reverse Leakage Current at $V_R=20V$	I_R			50	μA
Reverse Leakage Current at $V_R=40V$	I_R			60	μA
Forward Voltage at $I_F=100mA$	V_F			0.37	V
Forward Voltage at $I_F=500mA$	V_F			0.50	V
Forward Voltage at $I_F=1A$	V_F			0.60	V
Junction Capacitance $V_R = 0V, f = 1MHz$	C_J		90		pF

Characteristics Curves
Fig.1 Typical Forward Current Derating curve

Fig.2 Total capacitance vs. Reverse Voltage

Fig.3 Typical Instantaneous Forward Characteristics

Fig.4 Typical Reverse Characteristics




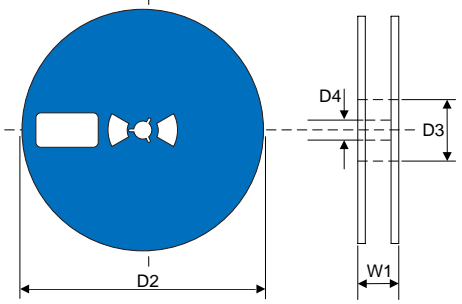
DFN1608-2L Package Outline



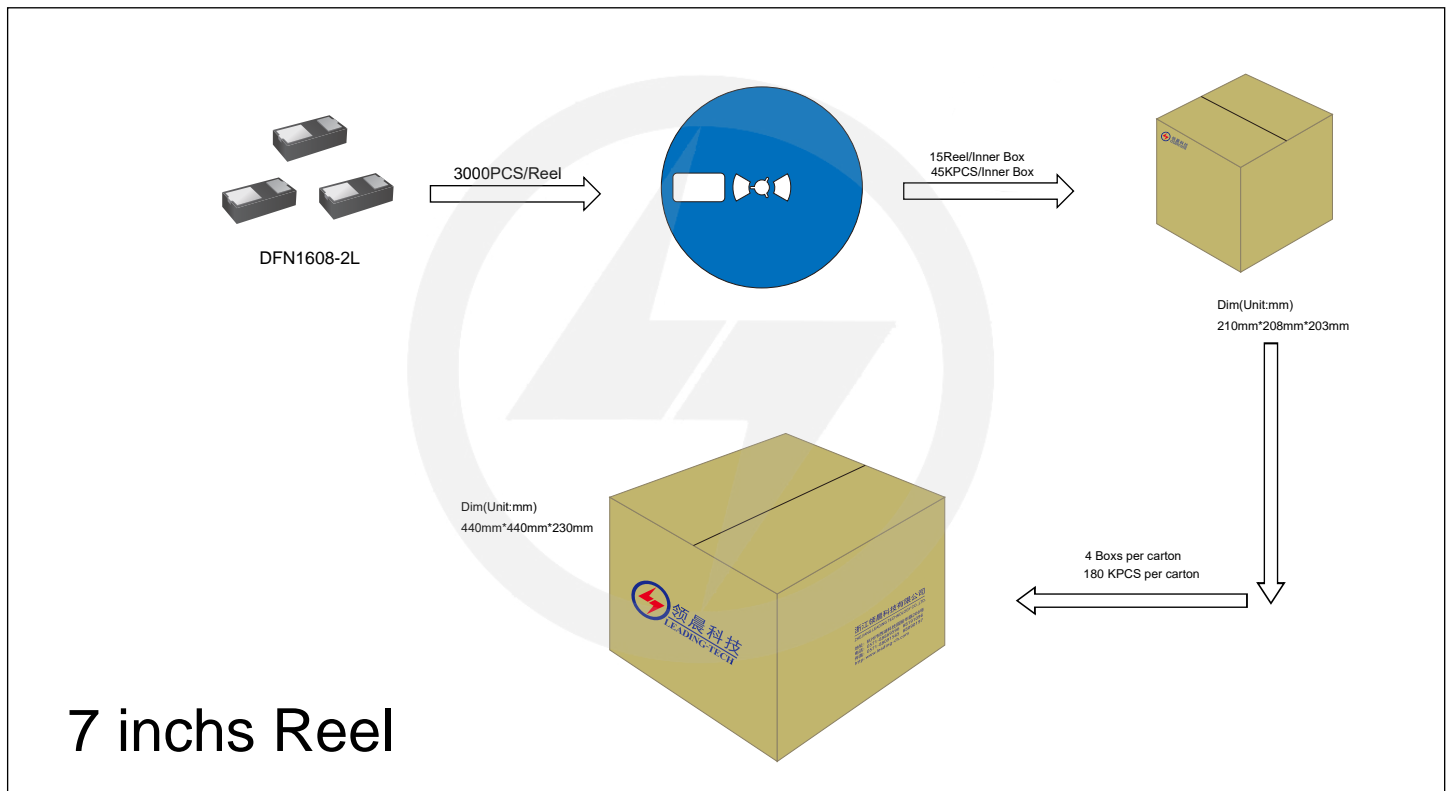
Symbol	Min(mm)	Typ.(mm)	Max(mm)
A	0.475	0.500	0.520
A1	0.000	0.003	0.050
B	0.550	0.600	0.650
C	0.152		
D	0.750	0.800	0.850
E	1.550	1.600	1.650
K	0.400	0.450	0.500
L1	0.650	0.700	0.750
L	0.300	0.350	0.400

Reel Dimensions

Unit : mm

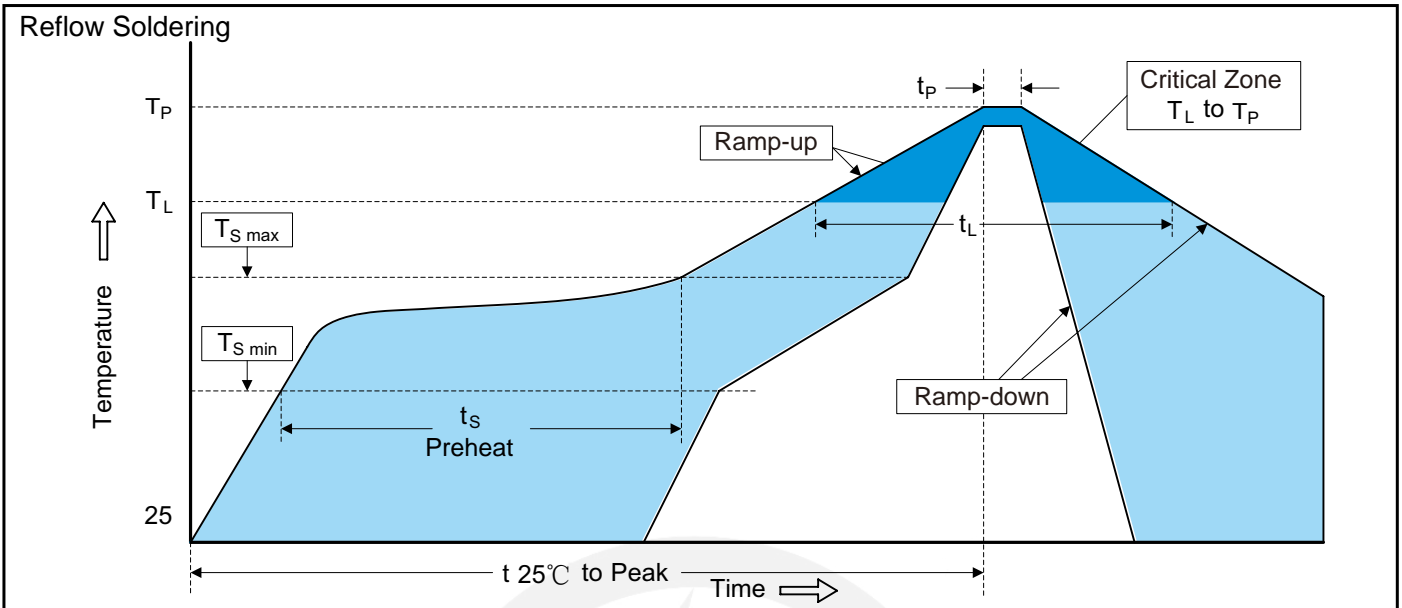
<p>7" Reel</p> 	D2	$\Phi 178.0 \pm 2.0$
	D3	$\Phi 50$
	D4	13.0 ± 0.5
	W1	12 ± 0.5
	Quantity: 3000PCS	

Packaging





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})	150°C
-Temperature Max (T _{S max})	200°C
-Time (min to max) (t _s)	60-180 seconds
T _{S max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	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.

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.4.20	2024.4.20	3.0	New File	/	Ding	