

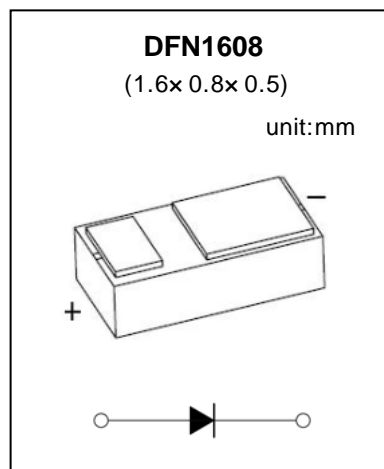
## SCHOTTKY BARRIER DIODE


### FEATURES

- Low forward voltage drop
- Small power mold type
- Low  $I_R$
- Small current rectification

### APPLICATIONS

- Low voltage rectification
- High efficiency DC- to- DC conversion
- Switch mode power supply
- LED backlight for mobile application
- Low power consumption applications
- Ultra high- speed switching
- Reverse polarity protection



**MARKING:** 

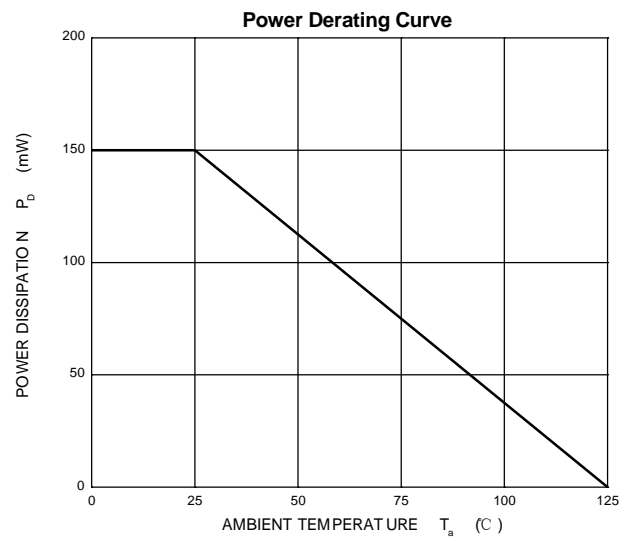
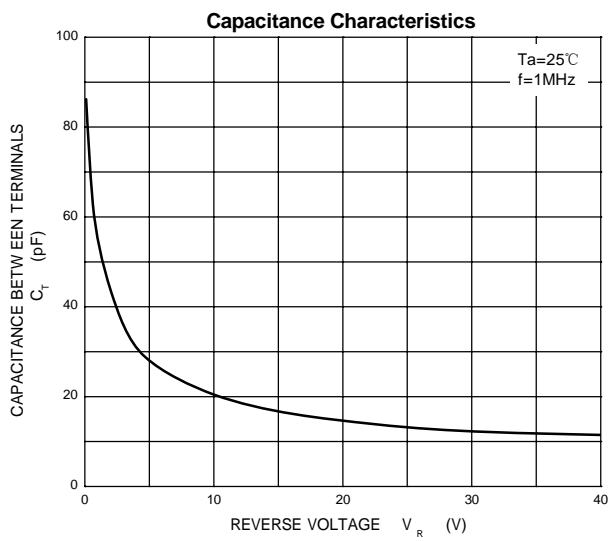
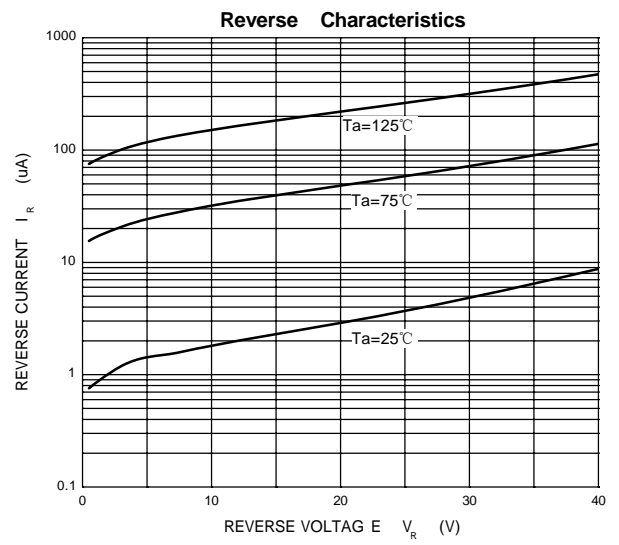
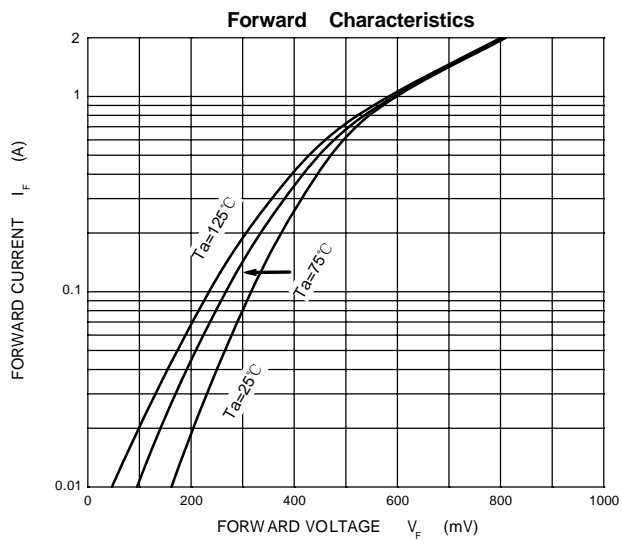
### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	40	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
$I_o$	Average Rectified Output Current	1	A
$I_{FSM}$	Non- repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	5	A
$P_D$	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	667	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	125	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	- 55~ +150	$^{\circ}\text{C}$

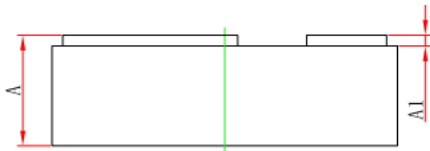
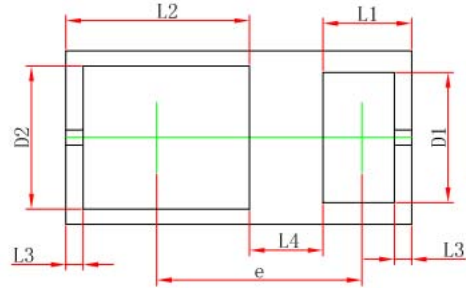
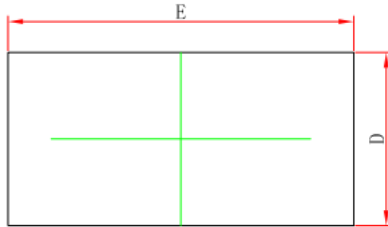
### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	40			V
Reverse current	$I_R$	$V_R=40\text{V}$			50	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=0.7\text{A}$			0.55	V
Diode capacitance	$C_d$	$V_R=1\text{V}; f=1\text{MHz}; T_j=25^{\circ}\text{C}$		50		pF
		$V_R=10\text{V}; f=1\text{MHz}; T_j=25^{\circ}\text{C}$		20		pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}; R_L=100\Omega;$ $I_{R(meas)}=1\text{mA}$		15		ns

## Typical Characteristics

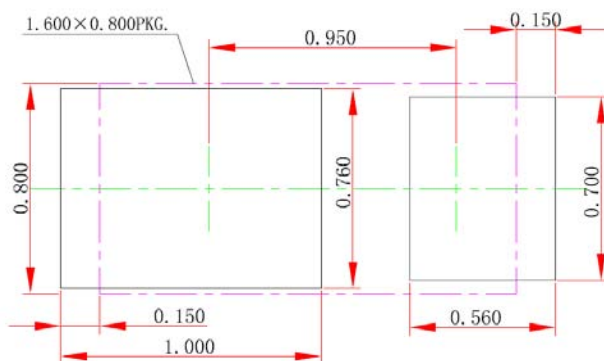


## DFN1608 (1.6X0.8X0.5) Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.010	0.090	0.000	0.004
D	0.750	0.850	0.030	0.033
D1	0.520	0.680	0.020	0.027
D2	0.600	0.760	0.024	0.030
E	1.550	1.650	0.061	0.065
L1	0.410 REF.		0.016 REF.	
L2	0.850 REF.		0.033 REF.	
L3	0.080 REF.		0.003 REF.	
L4	0.340 REF.		0.013 REF.	
e	0.900	1.000	0.035	0.039

## DFN1608 (1.6X0.8X0.5) Suggested Pad Layout

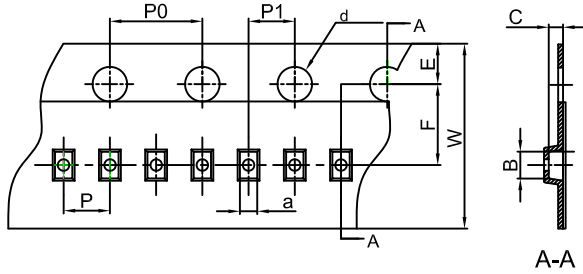


**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.050$ mm.
3. The pad layout is for reference purposes only.

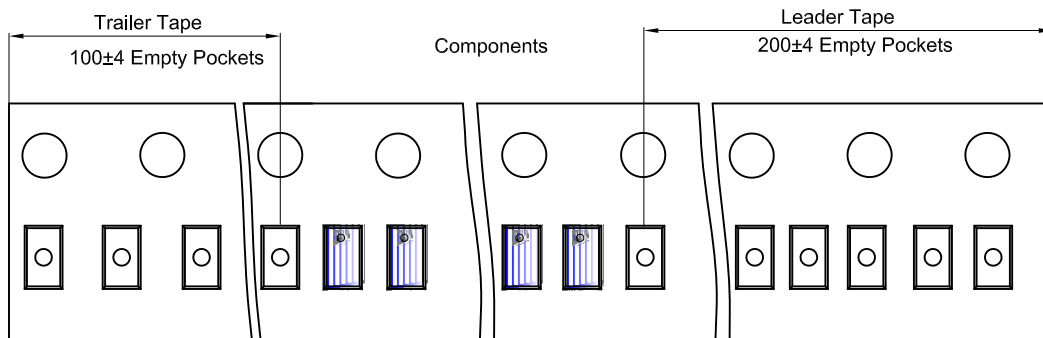
## DFN1608(1.6X0.8X0.5) Tape and Reel

### Embossed Carrier Tape

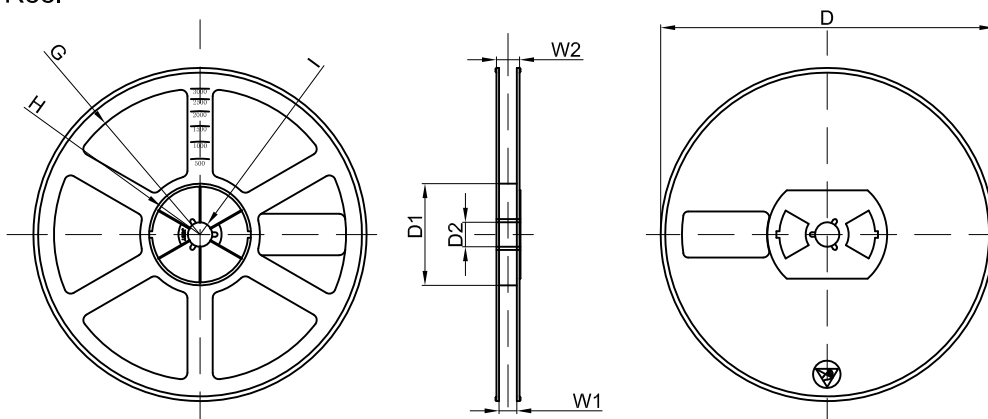


Dimensions are in millimeter										
Pkg type	a	B	C	d	E	F	P0	P	P1	W
WBFBP-02L(1.6×0.8×0.5)	0.90	1.75	0.66	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

### Tape Leader and Trailer



### Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
10000 pcs	7 inch	150,000 pcs	203×203×195	600,000 pcs	438×438×220	