

1N4148AE Fast Switching Diodes

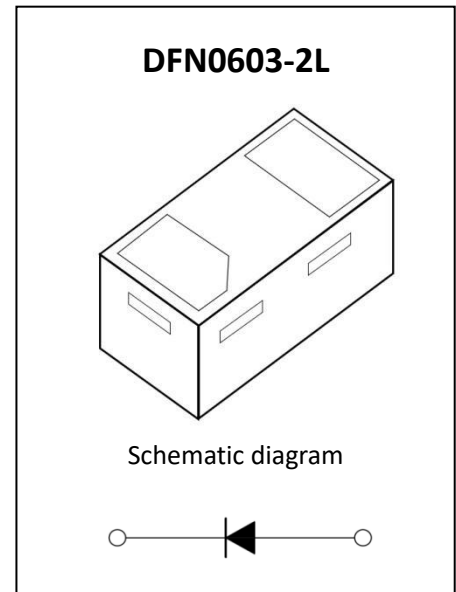
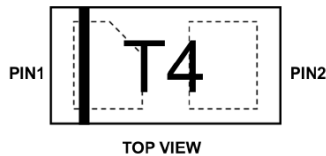
Feature

- V_R 75V
- I_{FAV} 150mA

Application

- Extreme fast switches

MARKING:



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

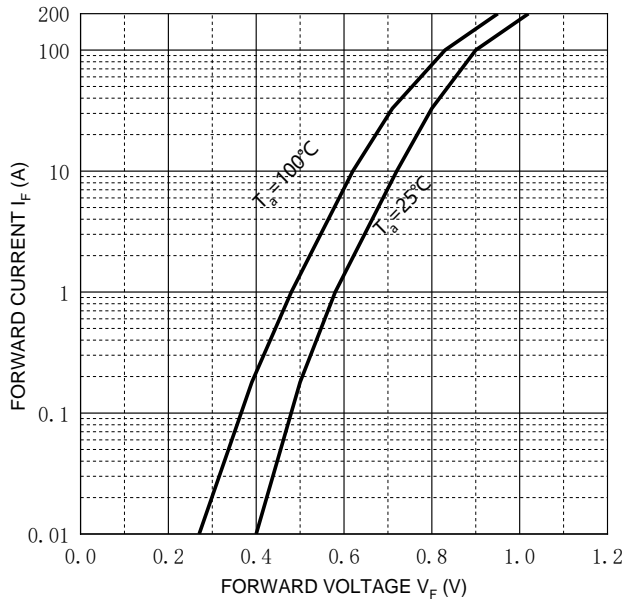
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Average rectified output current	I_O	0.15	A
Non-repetitive Peak Forward Surge Current @ $t=1$ us	I_{FSM}	2	A
Power Dissipation	P_D	100	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

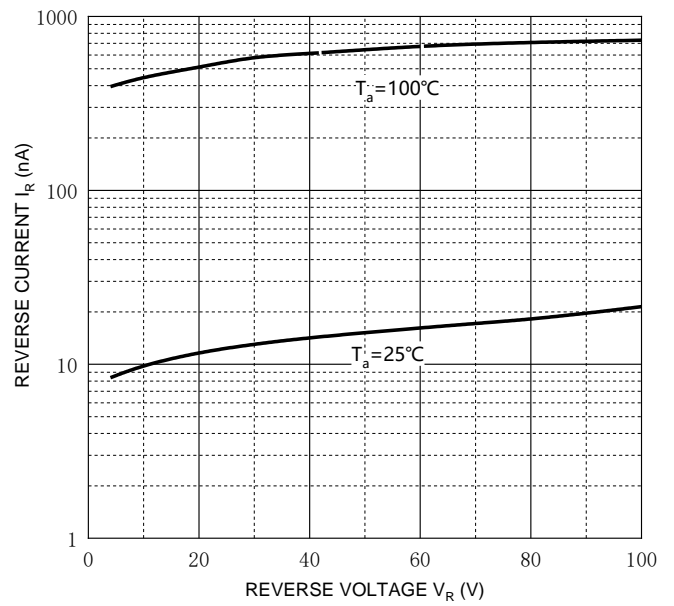
Parameter	Symbol	Test Condition	Min.	Max.	Unit
Forward voltage	V_F	$I_F = 1\text{mA}$		0.715	V
		$I_F = 10\text{mA}$		0.855	V
		$I_F = 50\text{mA}$		1.0	V
		$I_F = 150\text{mA}$		1.25	V
Reverse current	I_R	$V_R = 20\text{V}$		25	nA
		$V_R = 75\text{V}$		1	μA
Diode capacitance	C_D	$V_R = 0\text{V}$, $f = 1\text{MHz}$		4	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 * I_R$, $R_L = 100\Omega$		4	ns

Typical Electrical and Thermal Characteristics

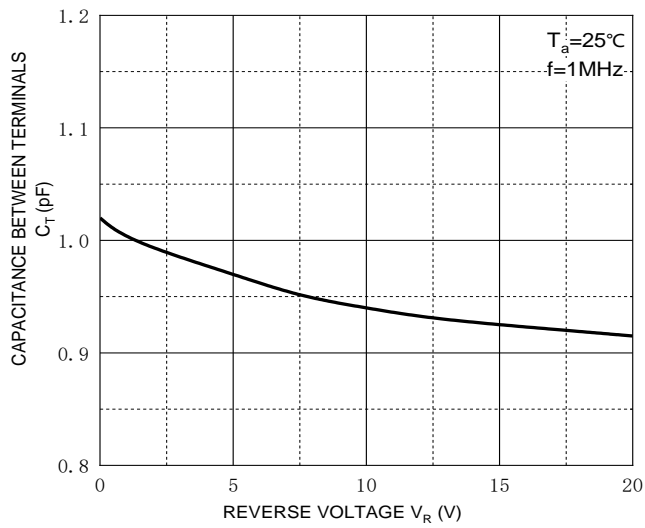
Forward Characteristics



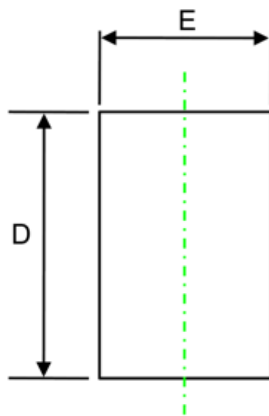
Reverse Characteristics



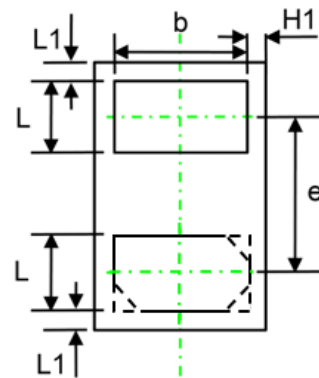
Capacitance Characteristics



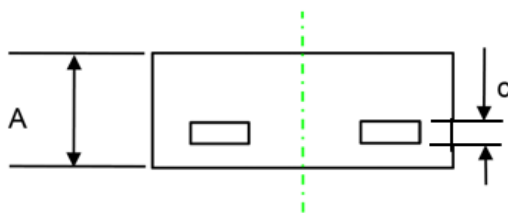
DFN0603-2L Package Outline Dimensions



TOP VIEW
[顶视图]



BOTTOM VIEW
[底视图]



SIDE VIEW
[侧视图]

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.270	0.350	0.011	0.014
E	0.250	0.350	0.010	0.014
D	0.550	0.650	0.022	0.026
b	0.200	0.300	0.008	0.012
c	0.050REF		0.002REF	
e	0.360TYP		0.014TYP	
L	0.130	0.230	0.005	0.009
L1	0.030REF		0.001REF	
H1	0.045REF		0.002REF	