

200mW Surface Mount Small Switching Diode

FEATURES

- Fast Switching Devices
- Low Reverse Leakage Current
- Extremely Small DFN1006 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Marking: D
- Tape and reel: 10,000Pcs/ 7" reel

DFN1006



MAXIMUM RATING(Tamb=25°C)

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
V_{RSM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage Reverse Voltage	80	V
I_{FRM}	Repetitive Peak Forward Current	300	mA
I_O	Average Forward Current	100	mA
I_{FSM}	Non-Repetitive Peak Forward Current *1	2	A
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

*1: Pulse width = 1μs.

ELECTRICAL CHARACTERISTICS (Tamb=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage at $I_R=100\mu A$	V_R	80			V
Reverse Leakage Current at $V_R=80V$ at $V_R=20V$	I_R			100 25	nA
Forward Voltage at $I_F=5mA$ at $I_F=10mA$ at $I_F=100mA$ at $I_F=150mA$	V_F	0.62		0.72 0.855 1.0 1.25	V
Capacitance at $V_R = 0.5V, f = 1MHz$	C			3	pF
Reverse Recovery Time at $I_F = I_R = 10mA, I_{RR} = 1mA$ $R_L = 100\Omega$	T_{RR}			4	ns

ELECTRICAL CHARACTERISTICS CURVE

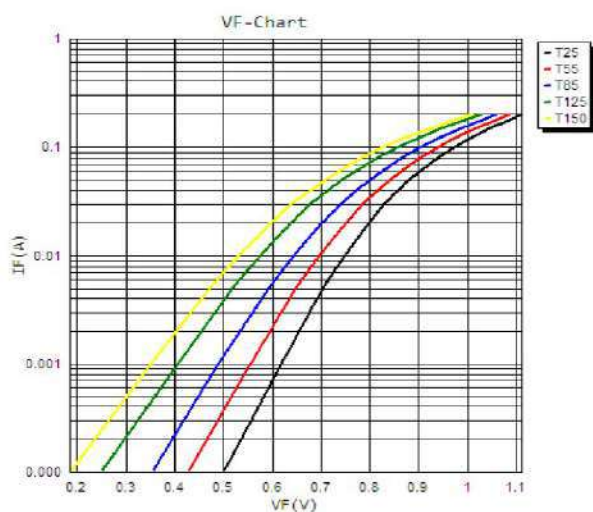


Fig.1 Forward current(I_F) vs Forward voltage(V_F)

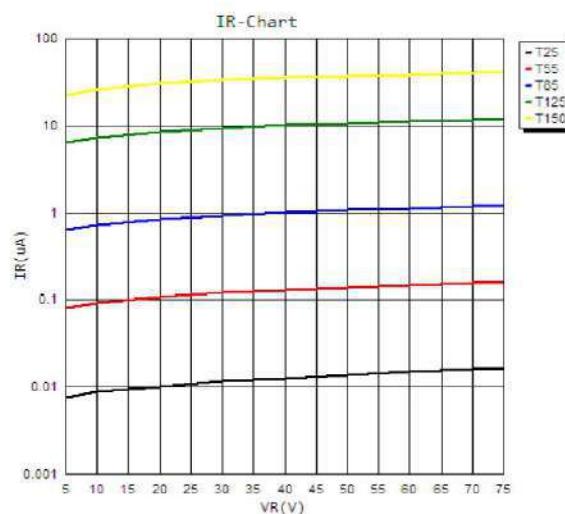


Fig.2 Reverse current(I_R) vs Reverse voltage(V_R)

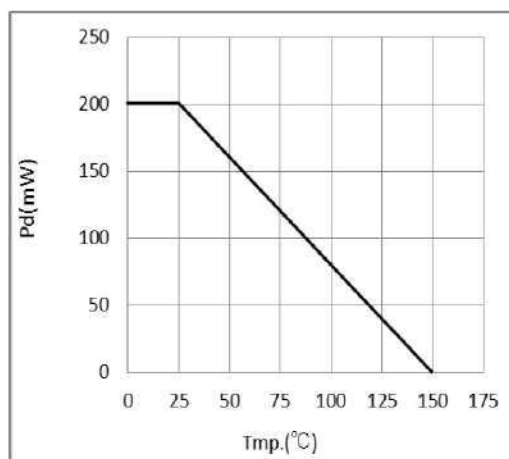


Fig.3 Power Derating Curve

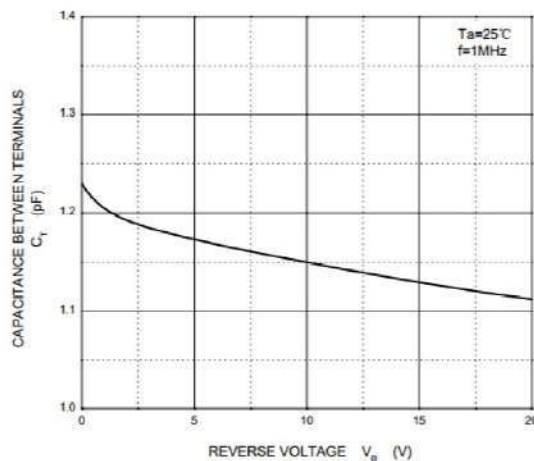
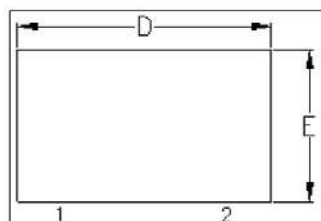


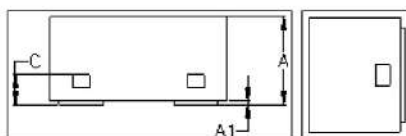
Fig.4 Capacitance vs Reverse voltage(V_R)

DFN-1006 PACKAGE OUTLINE DIMENSIONS

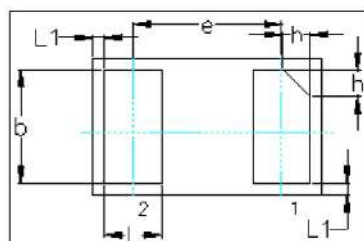
Top view



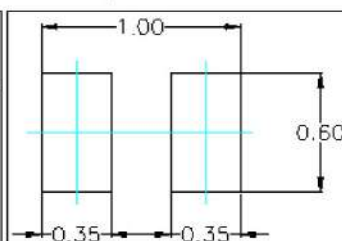
Side view



Back view



Soldering Pattern



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0.00	0.02	0.05
b	0.45	0.50	0.55
C	0.12	0.15	0.18
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05 REF.		
h	0.07	0.12	0.17

Notice:

- 1 Lead plating: Pb free solder
- 2 Lead thickness includes solder plating
- 3 Lead frame: Copper A194
- 4 Other Tolerance: ± 0.05
- 5 Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
- 6 Unit: mm