

SCHOTTKY BARRIER DIODE

FEATURES

- Low Forward Voltage Drop
- Extremely Small DFN1006 Package
- Surface Device Type Mounting
- RoHS Compliant
- Band Indicates Cathode
- Marking: X

DFN1006
RoHS
COMPLIANT


APPLICATION

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

MAXIMUM RATING (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Maximum repetitive reverse voltage	V_{RRM}	40	V
Maximum DC blocking reverse voltage	V_R	40	V
Average Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current (At 8.3ms single half sine-wave)	I_{FSM}	10	A
Operating Junction Temperature	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Min	Type	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

The above data are for reference only.

Typical Characteristics

Fig 1 Typical Forward Current Derating Curve

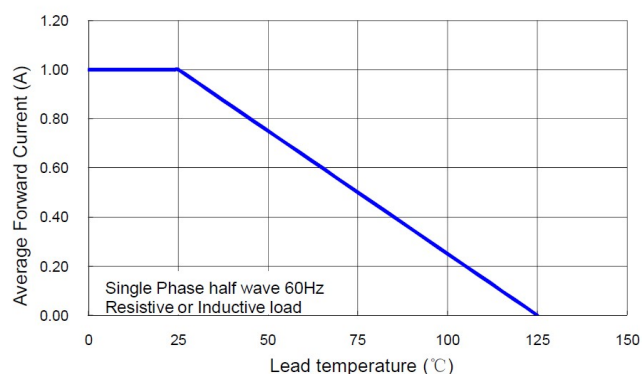


Fig 2 Total Capacitance vs. Reverse Voltage

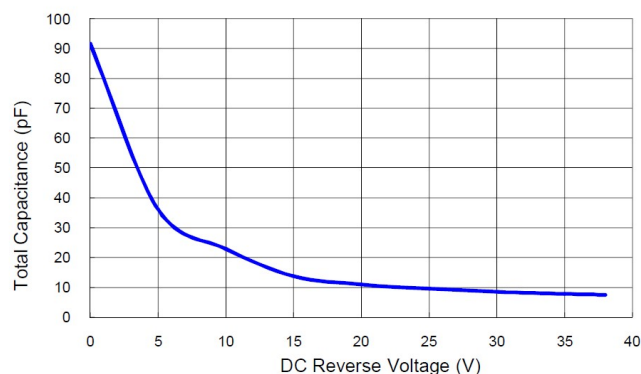


Fig 3 Typical Instantaneous Forward Characteristics

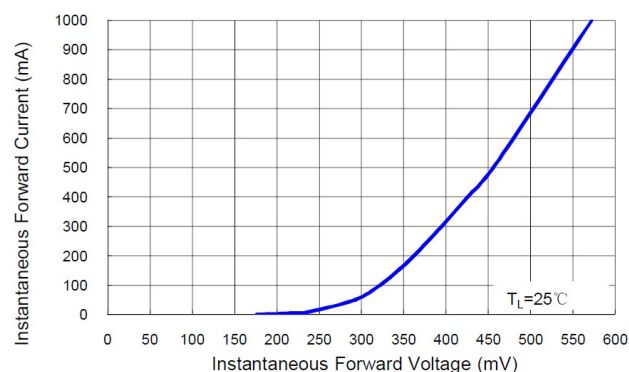
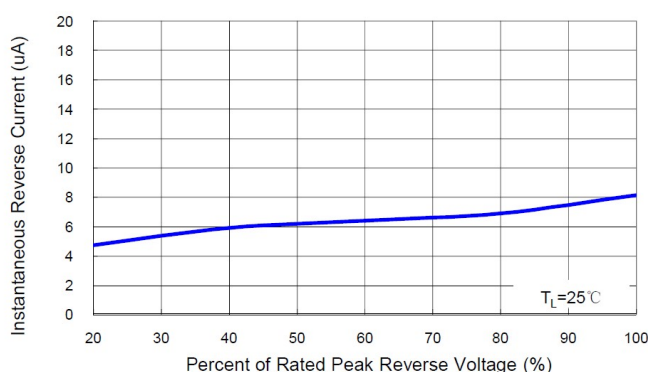


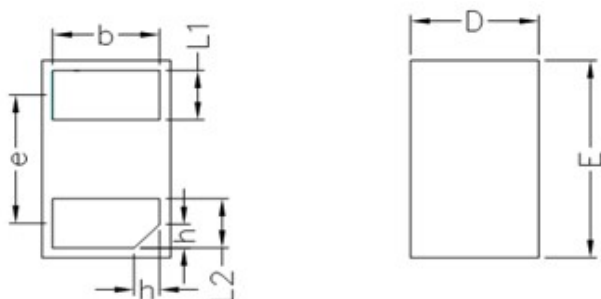
Fig 4 Typical Reverse Characteristics



The curve above is for reference only.

Outlitne Drawing

DFN1006 Package Outline Dimensions



Unit: mm

	MIN	NOM	MAX
D	0.55	0.60	0.65
E	0.95	1.00	1.05
L1	0.20	0.25	0.30
L2	0.20	0.25	0.30
b	0.45	0.50	0.55
e	0.65BSC		
A	0.45	0.50	0.55
h	0.07	0.12	0.17

