

■ ■ FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

■ ■ MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body over passivated chip

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0007 ounce, 0.02 grams

■ ■ MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Symbol	Parameter		DX1N 4001W	DX1N 4002W	DX1N 4003W	DX1N 4004W	DX1N 4005W	DX1N 4006W	DX1N 4007W	Units
V _{RRM}	Maximum Peak Repetitive Reverse Voltage		50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Voltage		35	70	140	280	420	560	700	V
V _{DC}	Maximum DC blocking Voltage		50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Output Current (NOTE 1)		1							A
I _{FSM}	Non-repetitive peak Forward Surge Current(8.3 ms single half-sine-wave superimposed on rated load)		30							A
V _F	Max Instantaneous Forward Voltage at 1.0A		1.1							V
I _R	Max DC reverse current at rated DC blocking voltage	TA=25°C	5.0							µA
C _J	Typical Junction Capacitance (NOTE 2)		4							pF
R _{θJA}	Typical Thermal Resistance (NOTE 3)		120							°C/W
T _J , T _{STG}	Operating Junction and Storage Temperature Range		-55 to +150							°C

Note: 1. Averaged over any 20ms period.

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. PCB mounted on 0.2" x 0.2" (5.0 x 5.0mm) copper pad area.

■ ■ RATINGS AND CHARACTERISTIC CURVES

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

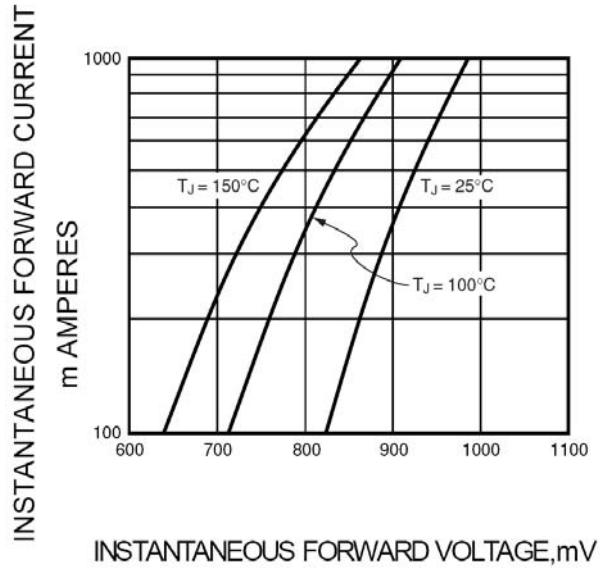
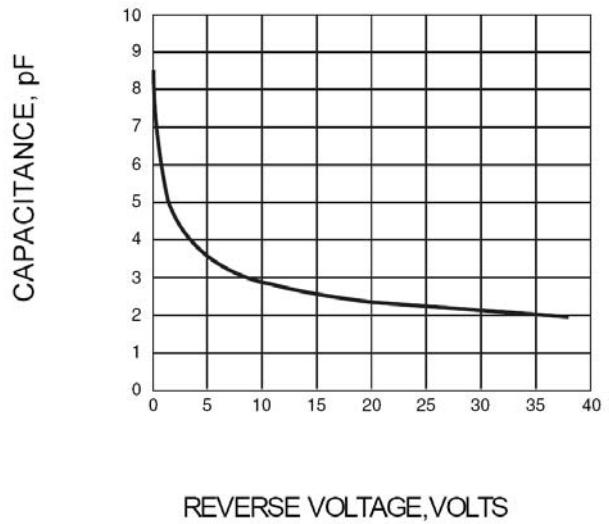
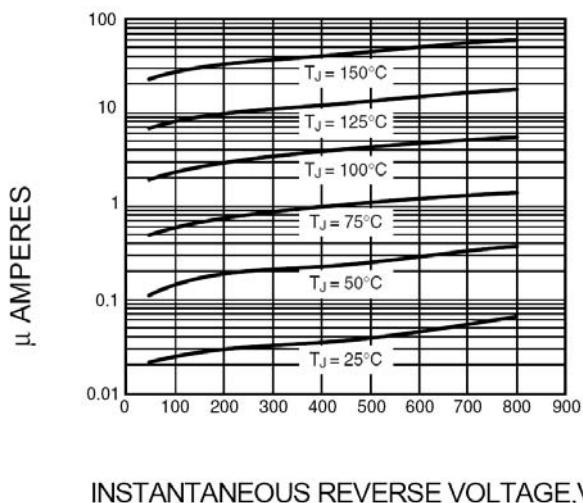


FIG.2 – TYPICAL JUNCTION CAPACITANCE



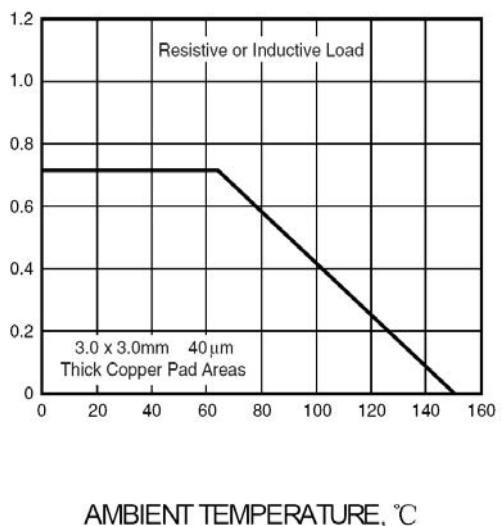
INSTANTANEOUS REVERSE CURRENT

FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

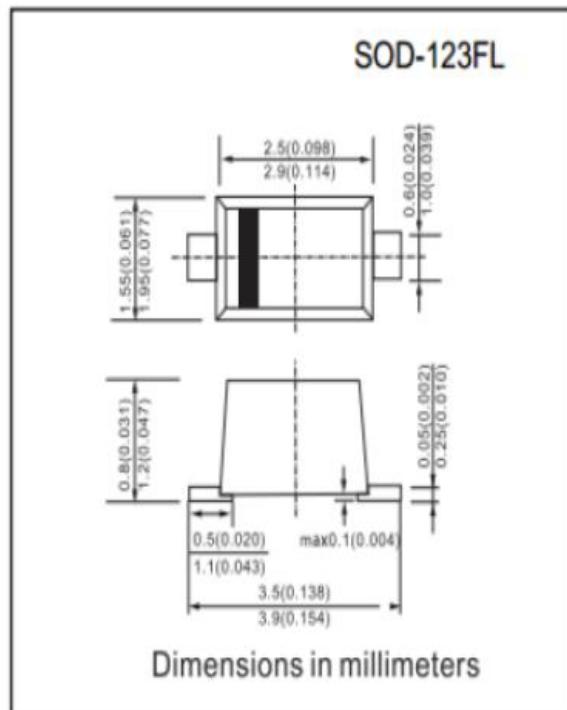


AVERAGE FORWARD CURRENT,
AMPERES

FIG.4 – FORWARD DERATING CURVE



■ ■ DIMENSION



■ ■ MARKING

Type number	Marking code
DX1N4001W	SA
DX1N4002W	SB
DX1N4003W	SD
DX1N4004W	SG
DX1N4005W	SJ
DX1N4006W	SK
DX1N4007W	SM