



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

E-mail: frontiersales@frontierusa.com

Web: <http://www.frontierusa.com>

100mA Advanced Schottky Barrier Diode (Surface mount small signal type)

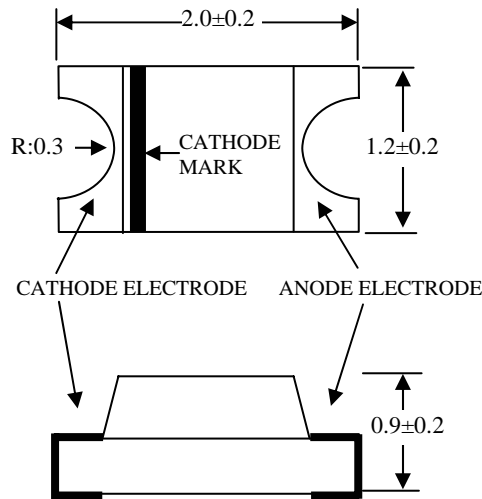
ASD501V

FEATURES

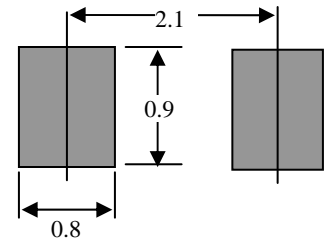
- EXTREMELY LOW VF
- EXTREMELY THIN PACKAGE
- LOW STORED CHARGE
- MAJORITY CARRIER CONDUCTION

MECHANICAL DATA

- CASE: SOD-323 DIMENSIONS IN MILLIMETERS
- TERMINALS: SOLDERABLE PER MIL-STD 750 METHOD 2026
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: 0.0045 GRAMS



Recommended Land Pattern Dimension



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS	SYMBOL	ASD501V	UNITS
BREAK DOWN VOLTAGE	B_V	45	V
CONTINUOUS REVERSE VOLTAGE	V_R	40	V
OPERATION CURRENT	I_O	100	mA
PEAK FORWARD SURGE CURRENT 8.3mS 1/2 Sine Wave	I_{FSM}	1.0	A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	20	PF
STORAGE TEMPERATURE RANGE	T_{STG}	- 40 TO + 125	°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 40 TO + 125	°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	ASD501V	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_F=100\text{mA}$	V_F	0.55	V
MAXIMUM DC REVERSE CURRENT AT $V_R=10\text{V}$	I_R	30	μA
MARKING		3	

NOTE: 1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 10.0 V

RATING AND CHARACTERISTIC CURVES ASD501V

FIG. 1 - FORWARD VOLTAGE CHARACTERISTICS

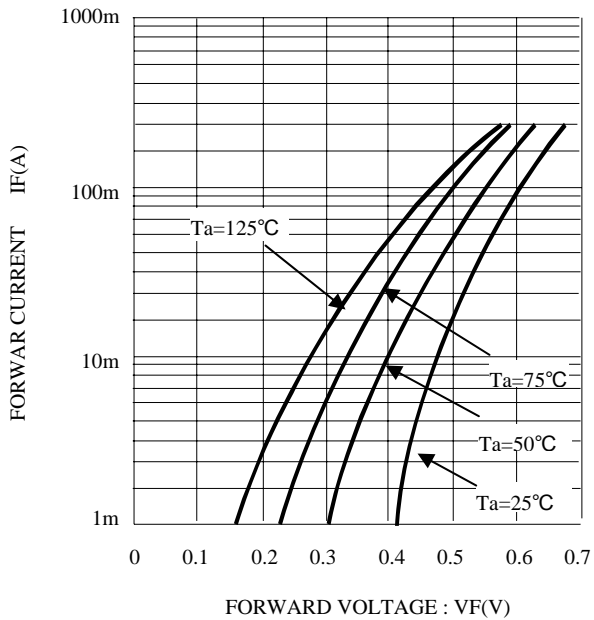


FIG. 2 - REVERSE VOLTAGE CHARACTERISTICS

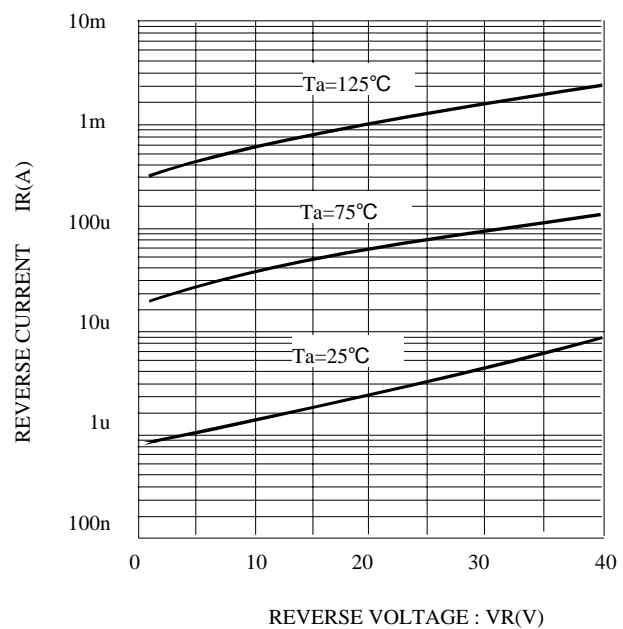


FIG. 3 - CAPACITANCE BETWEEN TERMINALS CHARACTERISTICS

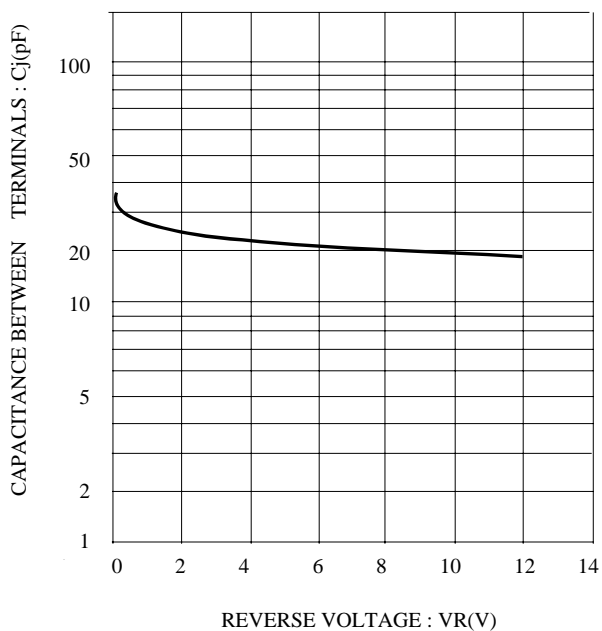


FIG. 4 - DERATING CURVE (MOUNTING ON GLASS EPOXY PCBS)

