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)

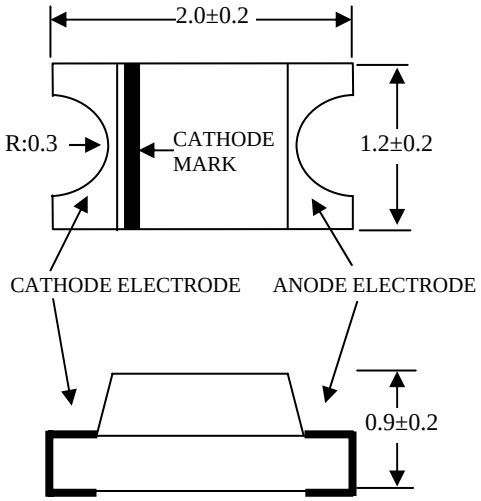
ASD500V

FEATURES

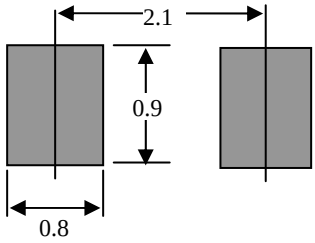
- EXTREMELY LOW VF
- EXTREMELY THIN PACKAGE
- LOW STORED CHARGE
- MAJORITY CARRIER CONDUCTION

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	ASD500V	UNITS
BREAK DOWN VOLTAGE	Bv	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	℃
OPERATING TEMPERATURE RANGE	T_{OP}	- 40 TO + 125	℃

ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	ASD500V	UNITS
MAXIMUM FORWARD VOLTAGE AT 10mA DC	V_F	0.45	V
MAXIMUM DC REVERSE CURRENT AT V_R=10V	I_R	1	μA
MARKING		2	

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

RATING AND CHARACTERISTIC CURVES ASD500V

FIG. 1 - FORWARD VOLTAGE CHARACTERISTICS

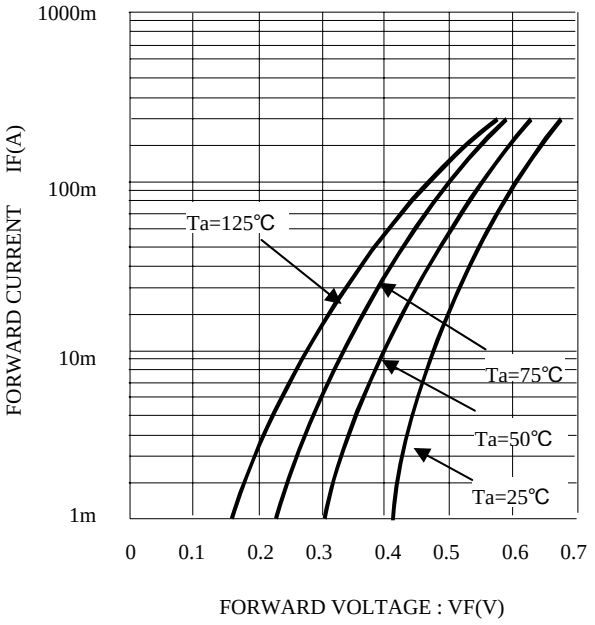


FIG. 2 – REVERSE VOLTAGE CHARACTERISTICS

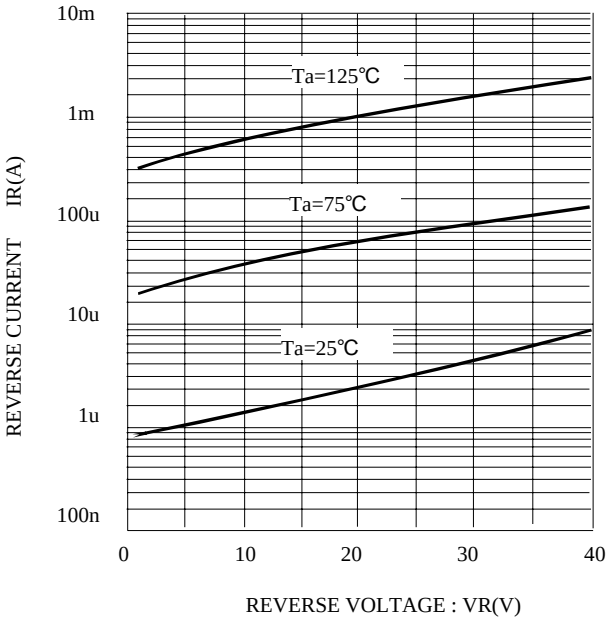


FIG. 3 – CAPACITANCE BETWEEN TERMINALS CHARACTERISTICS

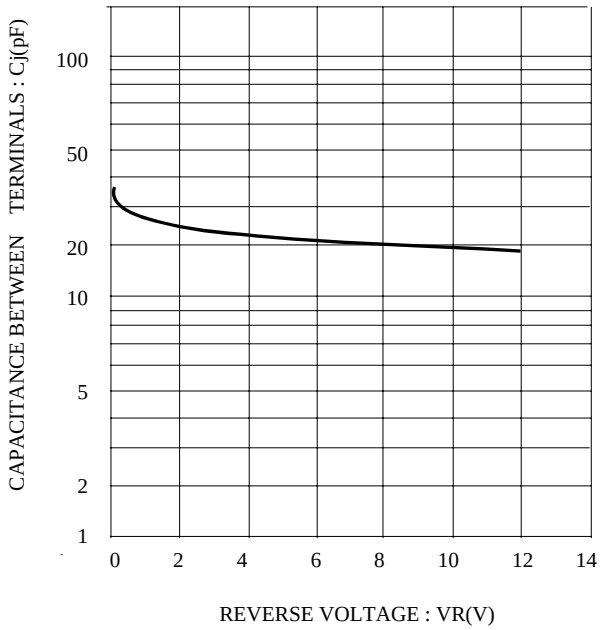


FIG. 4 – DERATING CURVE (MOUNTING ON GLASS EPOXY PCBS)

