



# Frontier Electronics Corp.

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

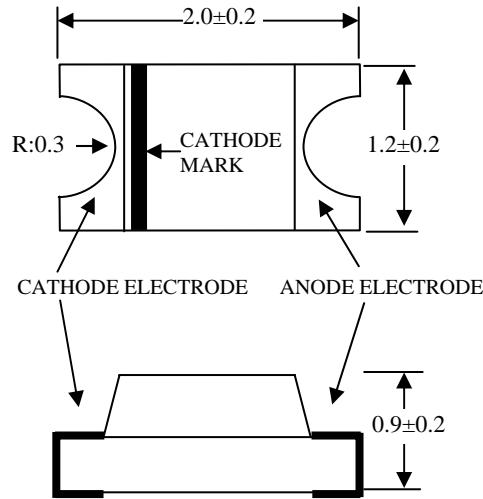
### ASD500V-LFR

#### FEATURES

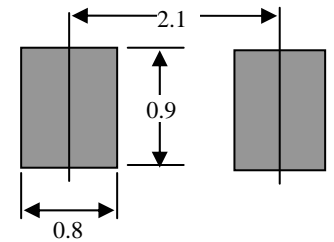
- EXTREMELY LOW VF
- EXTREMELY THIN PACKAGE
- LOW STORED CHARGE
- MAJORITY CARRIER CONDUCTION
- LEAD FREE

#### 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-LFR	UNITS
BREAK DOWN VOLTAGE	BV	45	V
CONTINUOUS REVERSE VOLTAGE	V <sub>R</sub>	40	V
OPERATION CURRENT	I <sub>O</sub>	100	mA
PEAK FORWARD SURGE CURRENT 8.3ms 1/2 Sine Wave	I <sub>FSM</sub>	1.0	A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C <sub>J</sub>	20	PF
STORAGE TEMPERATURE RANGE	T <sub>STG</sub>	- 40 TO + 125	°C
OPERATING TEMPERATURE RANGE	T <sub>OP</sub>	- 40 TO + 125	°C

#### ELECTRICAL CHARACTERISTICS (A<sub>T</sub> T<sub>A</sub> =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	ASD500V-LFR	UNITS
MAXIMUM FORWARD VOLTAGE AT 10mA DC	V <sub>F</sub>	0.45	V
MAXIMUM DC REVERSE CURRENT AT V <sub>R</sub> =10V	I <sub>R</sub>	1	μA
MARKING		2	

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

# RATING AND CHARACTERISTIC CURVES ASD500V-LFR

FIG. 1 - FORWARD VOLTAGE CHARACTERISTICS

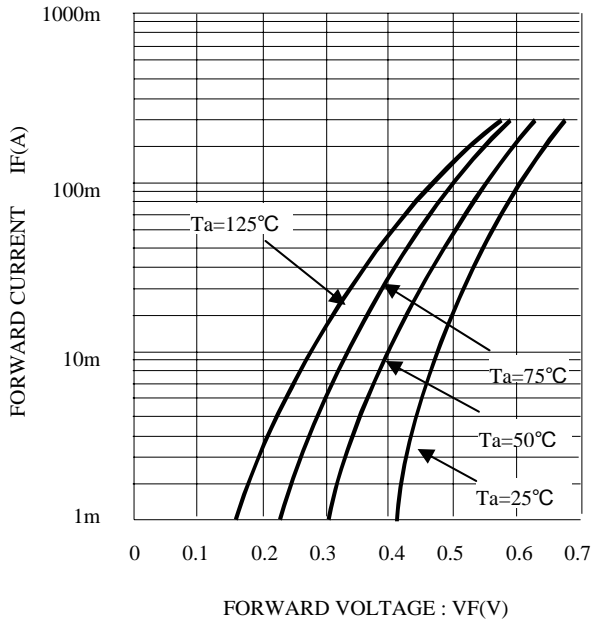


FIG. 2 - REVERSE VOLTAGE CHARACTERISTICS

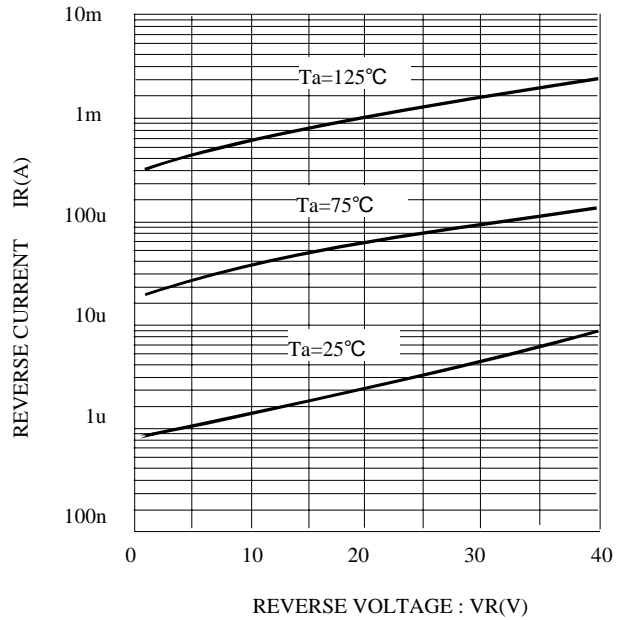


FIG. 3 - CAPACITANCE BETWEEN TERMINALS CHARACTERISTICS

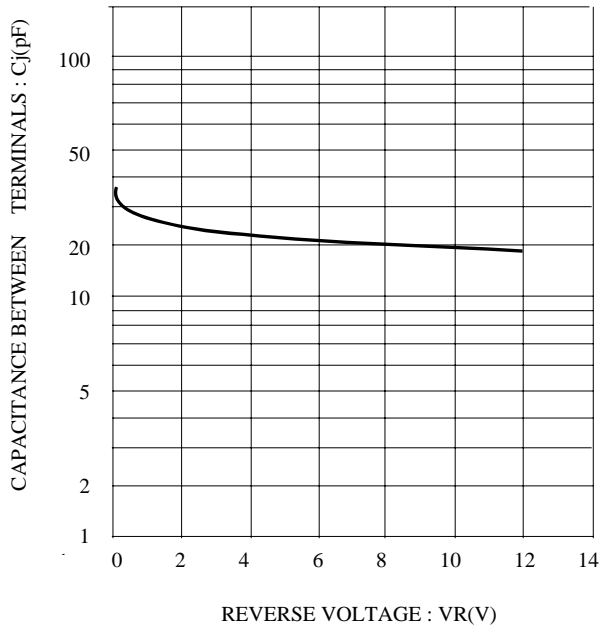


FIG. 4 - DERATING CURVE (MOUNTING ON GLASS EPOXY PCBS)

