



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>

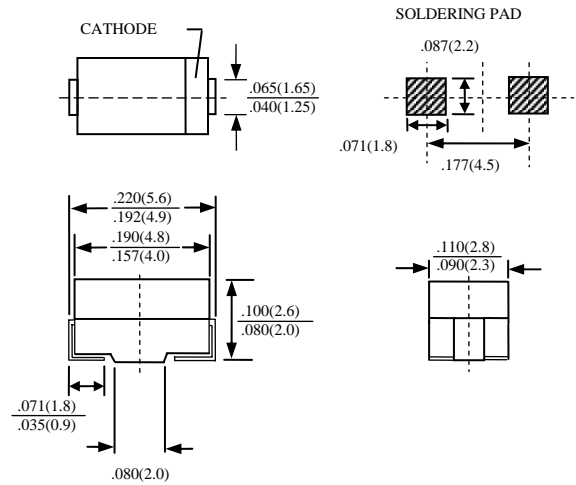
1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS SS12 THRU SS110

FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V-0 FLAME RETARDANT EPOXY MOLDING COMPOUND

MECHANICAL DATA

- CASE: TRANSFER MOLDED
- TERMINALS SOLDERABLE PER MIL-STD-750, METHOD 2026
- POLARITY CATHODE INDICATED BY COLOR BAND
- WEIGHT 0.064 GRAMS



CASE : DO-214AC (SMA)

DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED
SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS110	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	20	30	40	50	60	70	80	90	100	V
MAXIMUM RMS VOLTAGE	V_{RMS}	14	21	28	35	42	49	56	63	70	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	20	30	40	50	60	70	80	90	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_J=90^\circ\text{C}$	I_O	1.0									A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	25									A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	70									PF
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150									°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 125									°C

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

CHARACTERISTICS	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS110	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	0.50			0.70		0.85				V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	0.5									mA

NOTE : 1. MEASURED AT 1.0 MHz AND APPLIED REVERSE VOLTAGE OF 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVE SS12 THRU SS110

FIG. 1 - FORWARD CURRENT DERATING CURVE

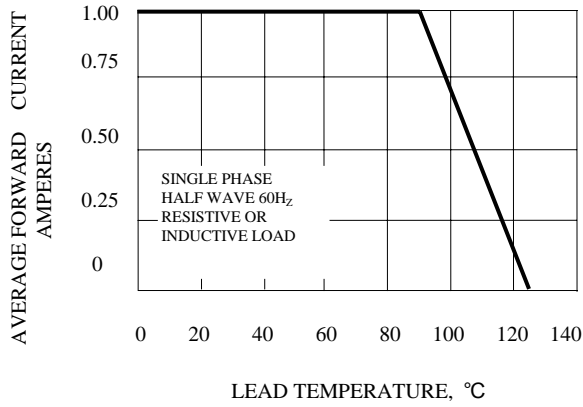


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

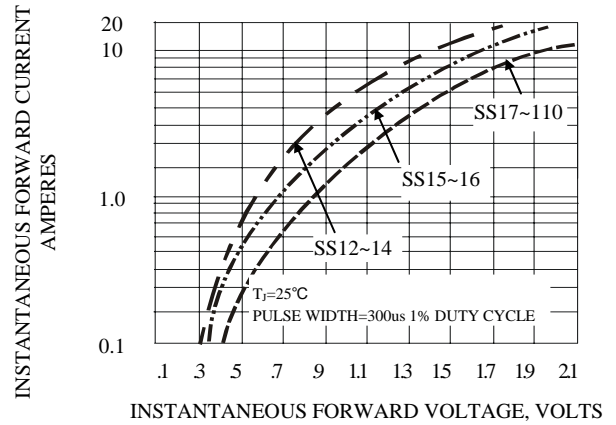


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

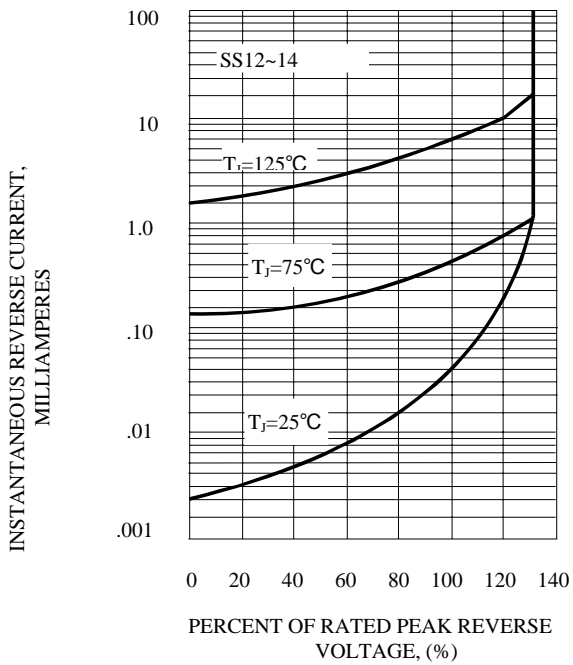


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

