



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

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

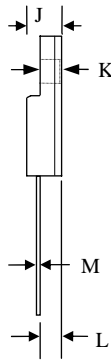
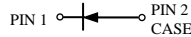
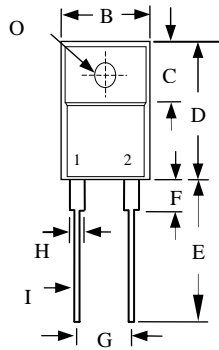
E-mail: frontiersales@frontierusa.com

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

10A SCHOTTKY BARRIER RECTIFIERS

SRF10-03 THRU SRF10-10

CASE : ITO-220AC(SRF10-XX) , FULLY INSULATED PACKAGE



	MILLIMETERS	
	MIN	MAX
B	9.72	10.27
C	6.30	6.90
D	14.50	15.50
E	13.00	13.80
F	-	4.1
G	4.95	5.20
H	-	1.52
I	-	0.9
J	-	4.8
K	-	3.1
L	2.5	2.9
M	-	0.8
O	-	Ø 3.4

FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND

MECHANICAL DATA

- CASE: TRANSFER MOLDED
- LEADS: SOLDERABLE PER MIL-STD-202,METHOD 208
- POLARITY: AS MARKED
- WEIGHT: 1.81 GRAMS

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	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	UNITS
		-03	-035	-04	-045	-05	-06	-07	-08	-09	-10	
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	30	35	40	45	50	60	70	80	90	100	V
MAXIMUM RMS VOLTAGE	V_{RMS}	21	24	28	31	35	42	49	56	63	70	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	30	35	40	45	50	60	70	80	90	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1 PER LEG	I_o	10.0 5.0										A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD PER LEG	I_{FSM}	125										A
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150										°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 125										°C

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

CHARACTERISTICS	SYMBOL	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	SRF10	UNITS
		-03	-035	-04	-045	-05	-06	-07	-08	-09	-10	
MAXIMUM FORWARD VOLTAGE AT I_o PER LEG	V_F	0.55					0.70		0.85			V
MAXIMUM REVERSE CURRENT AT 25°C PER LEG (NOTE 1)	I_R	5.0										mA
MAXIMUM REVERSE CURRENT AT 100°C PER LEG (NOTE 1)	I_R	50.0										mA

THERMAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	SRF10	UNITS
TYPICAL THERMAL RESISTANCE JUNCTION TO CASE PER LEG	$R_{\theta jc}$	4.0	°C/W

NOTES: 1. PULSE TEST: 300µS PULSE WIDTH, 1% DUTY CYCLE

RATINGS AND CHARACTERISTIC CURVES OF SRF10-03 AND SRF10-10

FIG. 1 - FORWARD CURRENT DERATING CURVE

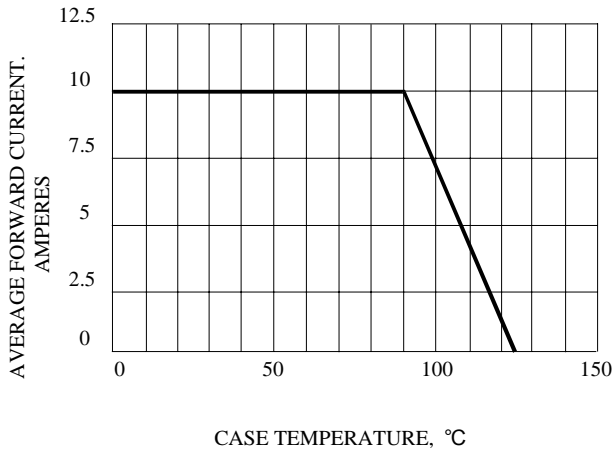


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

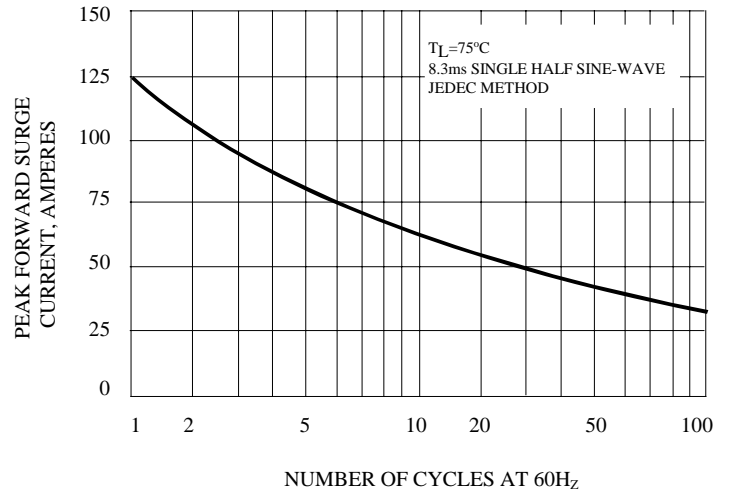


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

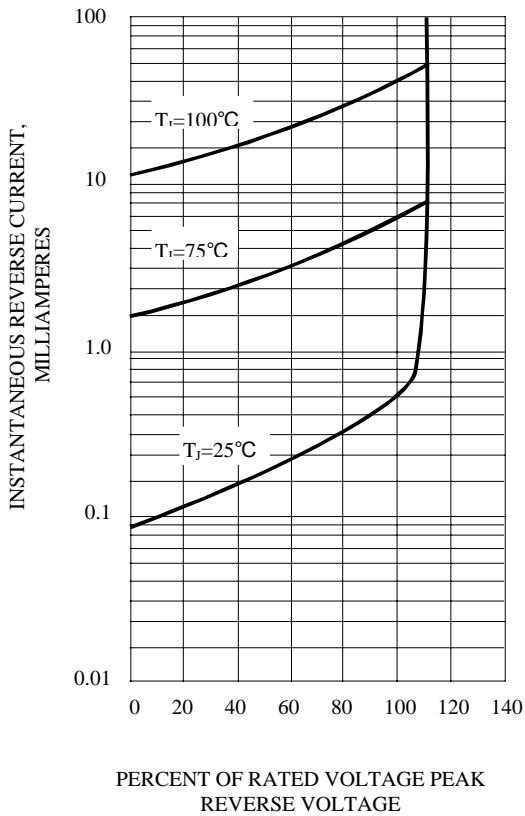


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

