



# Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

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

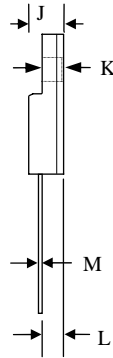
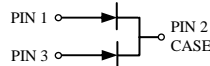
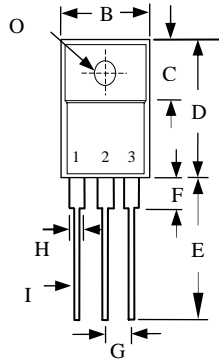
E-mail: [frontiersales@frontierusa.com](mailto:frontiersales@frontierusa.com)

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

## 5A DUAL SCHOTTKY BARRIER RECTIFIERS

### SRF5-02CT-LFR THRU SRF5-10CT-LFR

CASE : ITO-220AB( SRF5-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	2.41	2.67
H	-	1.52
I	-	0.9
J	-	4.8
K	-	3.1
L	2.5	2.9
M	-	0.8
O	-	Ø3.4

#### FEATURES

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

#### MECHANICAL DATA

- CASE: TRANSFER MOLDED
- LEADS: SOLDERABLE PER MIL-STD-202,METHOD 208
- POLARITY: AS MARKED
- WEIGHT 2.05 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	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	UNITS
		02CT-LFR	03CT-LFR	04CT-LFR	045CT-LFR	05CT-LFR	06CT-LFR	07CT-LFR	08CT-LFR	09CT-LFR	10CT-LFR	
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	20	30	40	45	50	60	70	80	90	100	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	14	21	28	31	35	42	49	56	63	70	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	20	30	40	45	50	60	70	80	90	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1 PER LEG	$I_O$	5.0 2.5										A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD PER LEG	$I_{FSM}$	150										A
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150										°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 125										°C

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

CHARACTERISTICS	SYMBOL	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	SRF5-	UNITS
		02CT-LFR	03CT-LFR	04CT-LFR	045CT-LFR	05CT-LFR	06CT-LFR	07CT-LFR	08CT-LFR	09CT-LFR	10CT-LFR	
MAXIMUM FORWARD VOLTAGE AT 2.5A PER LEG	$V_F$	0.55			0.70			0.80			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<sub>C</sub> =25°C UNLESS OTHERWISE NOTED )

PARAMETER	SYMBOL	SRF5	UNITS
TYPICAL THERMAL RESISTANCE JUNCTION TO CASE PER LEG	$R_{\theta jc}$	6.0	°C/W

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

# RATINGS AND CHARACTERISTIC CURVES OF SRF5-02CT-LFR AND SRF5-10CT-LFR

FIG. 1 - FORWARD CURRENT DERATING CURVE

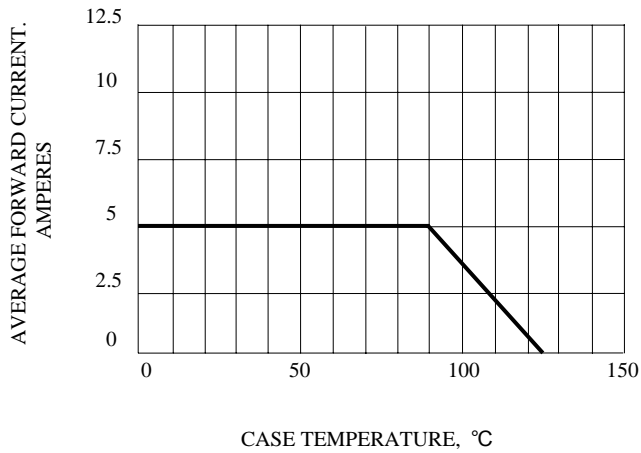


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

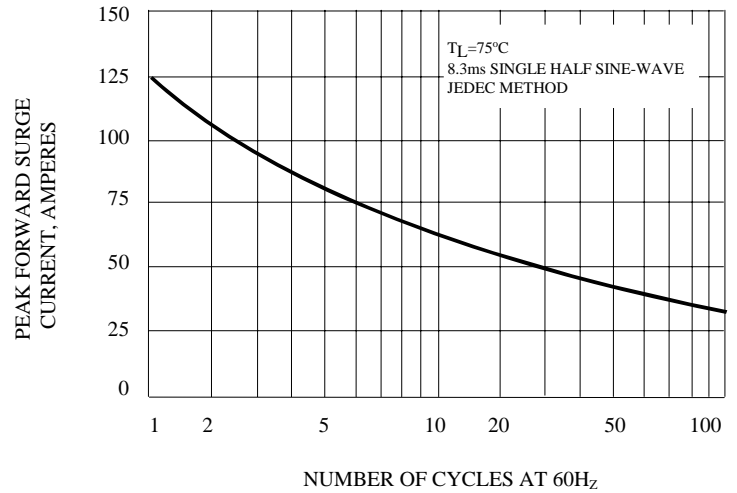


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

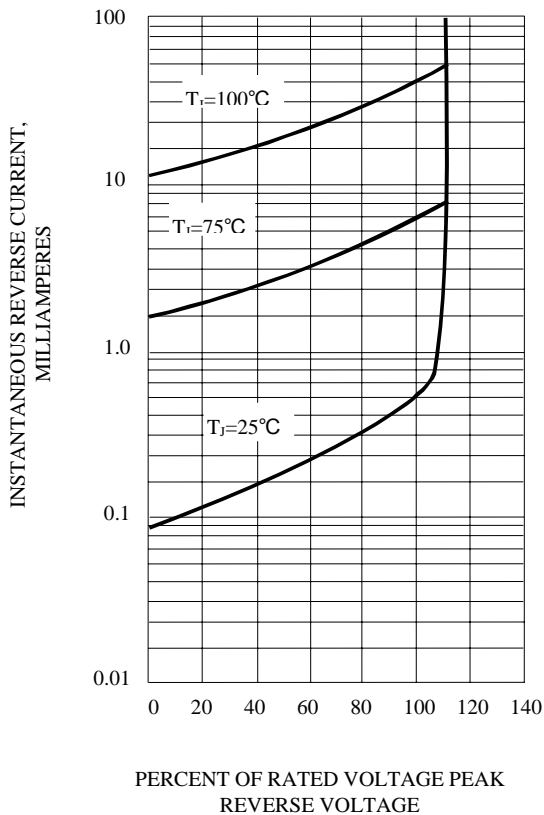


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

