



# Frontier Electronics Corp.

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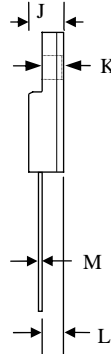
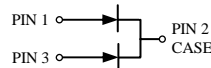
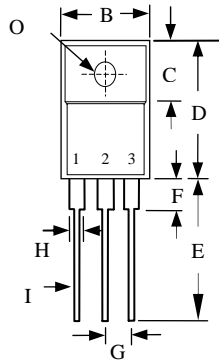
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## 10A DUAL SCHOTTKY BARRIER RECTIFIERS

### SRF10-03CT THRU SRF10-10CT

CASE : ITO-220AB( 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	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	-	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: 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	SRF10-03CT	SRF10-035CT	SRF10-04CT	SRF10-045CT	SRF10-05CT	SRF10-06CT	SRF10-07CT	SRF10-08CT	SRF10-09CT	SRF10-10CT	UNITS
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										A
		5.0										
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	SRF10-03CT	SRF10-035CT	SRF10-04CT	SRF10-045CT	SRF10-05CT	SRF10-06CT	SRF10-07CT	SRF10-08CT	SRF10-09CT	SRF10-10CT	UNITS
MAXIMUM FORWARD VOLTAGE AT 5A 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 SRF10-03CT AND SRF10-10CT

FIG. 1 - FORWARD CURRENT DERATING CURVE

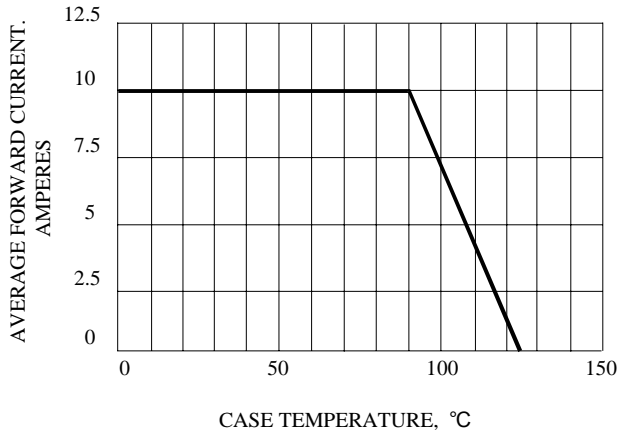


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

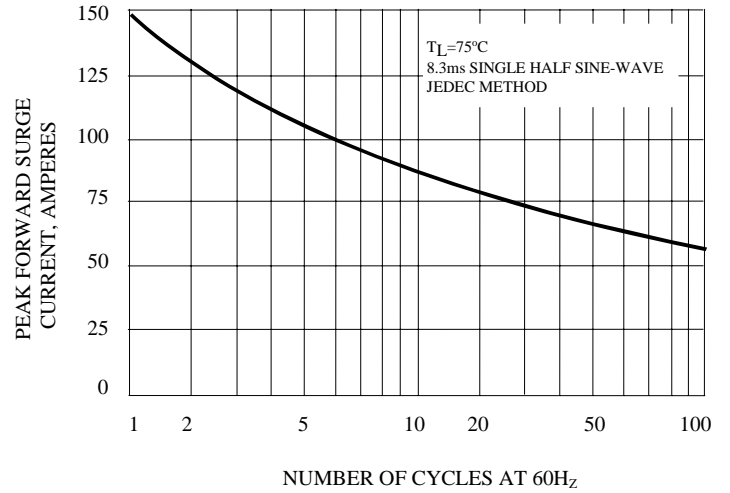


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

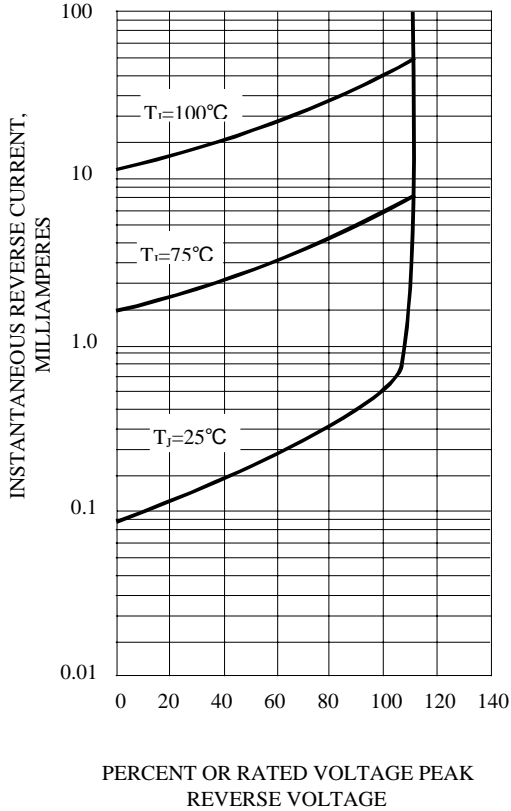


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

