

DATA BUS TERMINATOR / 3-PHASE, FULL WAVE BRIDGE

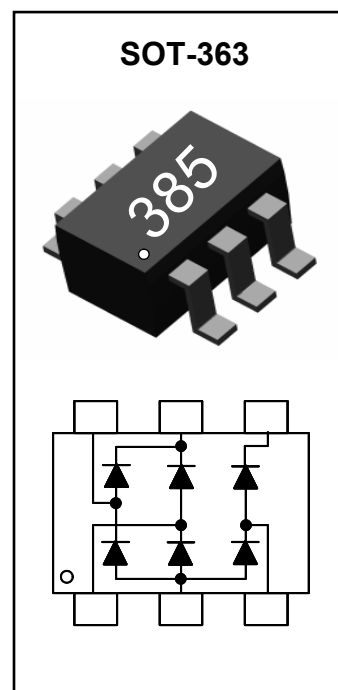
This highly integrated device is designed as rail to rail overvoltage protection clamp for up to 3 data lines. It is also ideal as a three-phase, full wave bridge. PanJit's PJ3L85 is ideal in portable applications where small form factors are required.

FEATURES

- Very Low Reverse Leakage Current
- Fast Switching
- Ultra Small SOT-363 Package Utilizing Minimal Board Space
- Lead Free Plating, 100% Matte Tin Finish, RoHS Compliant

APPLICATIONS

- PDAs
- Portable Computers



MAXIMUM RATINGS $T_A = 25^{\circ}\text{C}$, unless otherwise noted

Rating	Symbol	Value	Units
Marking Code		385	
Reverse Voltage	V_R	85	V
Continuous Forward Current	I_F	160	mA
Non-Repetitive Surge Current, $t=1\text{s}$	I_{FSM}	500	mA
Power Dissipation (Note 1)	P_D	200	mW
Operating Junction Temperature Range	T_J	-65 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^{\circ}\text{C}$

Note 1: Device Mounted on FR-4 board 1.0 inch x 0.85 inch x 0.062 inch, with minimum pad layout.

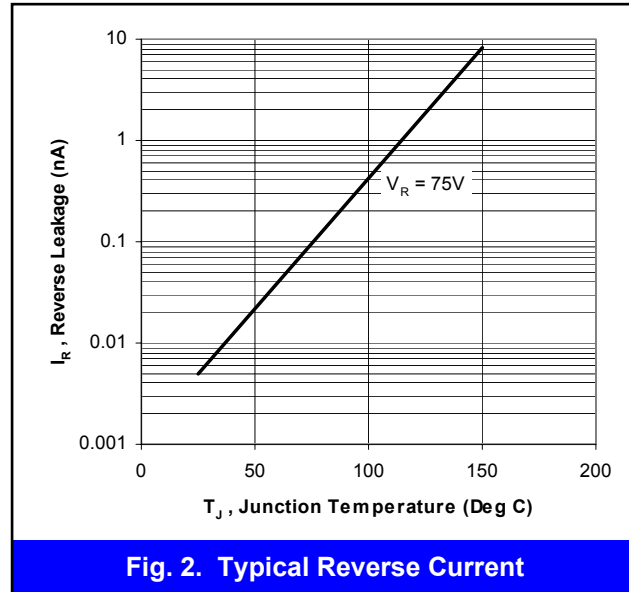
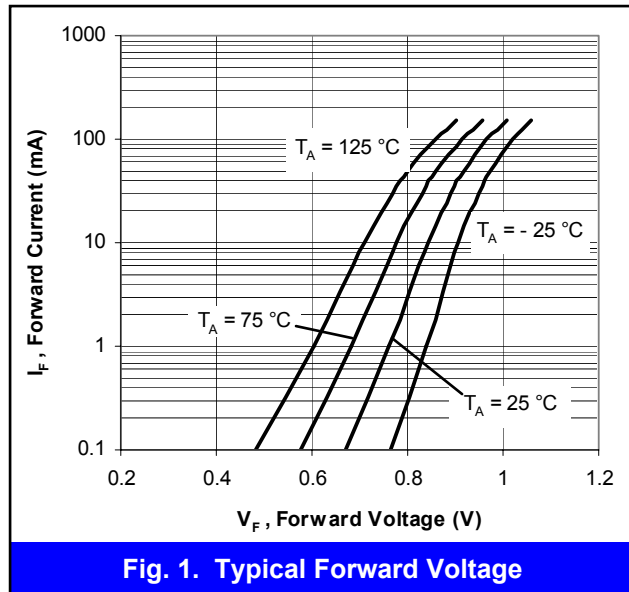
THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Units
Thermal Resistance, Junction to Ambient	R_{thja}	625	$^{\circ}\text{C/W}$

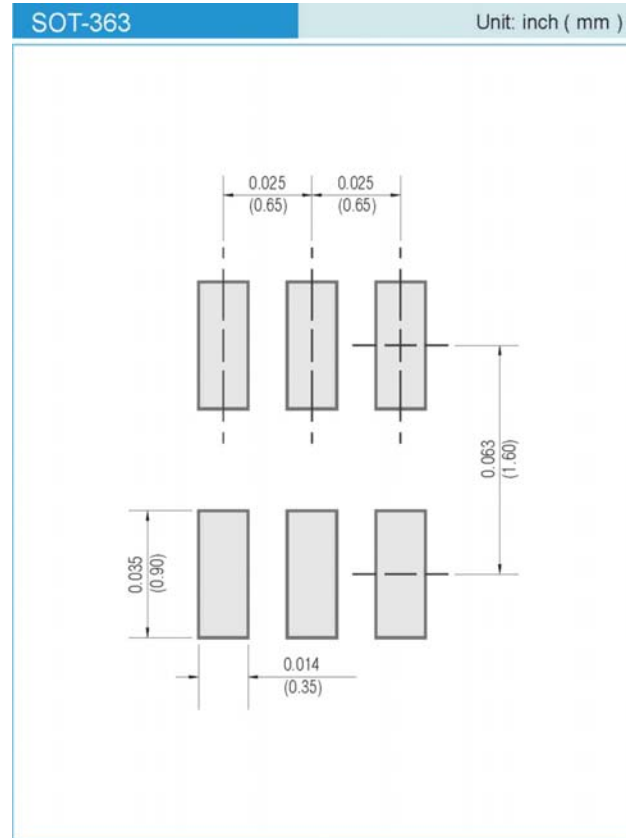
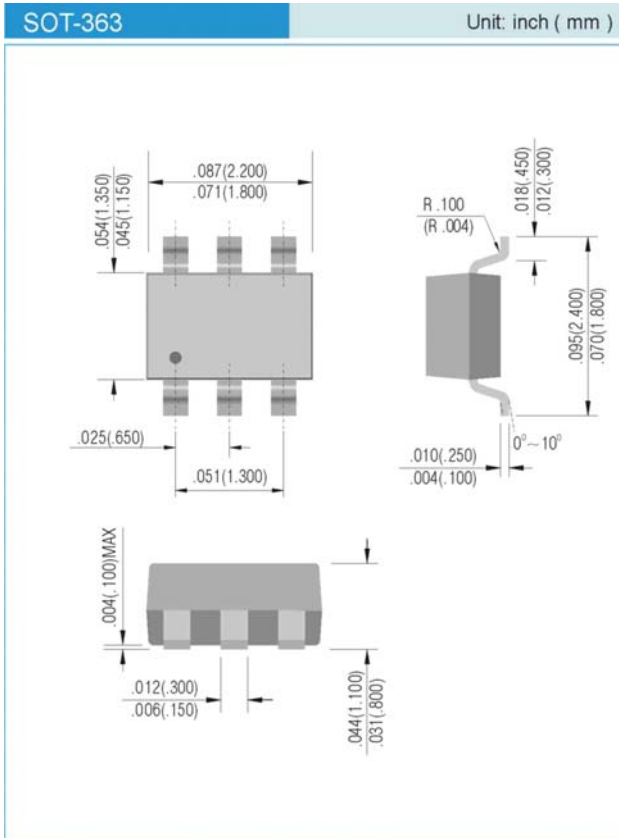
ELECTRICAL CHARACTERISTICS (Each Diode)
 $T_J = 25^\circ\text{C}$, unless otherwise noted

Characteristic	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2) $I_R = 100\mu\text{A}$	V_{BR}	85	-	-	V
Forward Voltage (Note 2)	V_F	-	0.76	0.90	V
			0.84	1.00	
			0.92	1.10	
			1.00	1.25	
Reverse Leakage Current (Note 2) $V_R = 75\text{V}$	I_R	-	-	5.0	nA
		-	-	80	
Total Capacitance $V_R = 0\text{V}$, $f = 1.0\text{ MHz}$	Per Element	-	1.25	2.0	pF
	Data Line to Ground	-	2.0	6	
	Between Data Lines	-	3.0	7	
Reverse Recovery Time $I_F = I_R = 10\text{mA}$ $I_{rr} = 1.0\text{mA}$, $R_L = 100\text{ Ohm}$	t_{rr}	-	-	3.0	us

Note 2: Short duration test pulse to minimize self heating

ELECTRICAL CHARACTERISTIC CURVES (Each Diode)


PACKAGE LAYOUT AND SUGGESTED PAD DIMENSIONS



ORDERING INFORMATION

PJ3L85 T/R7 - 7 inch reel, 3K units per reel

PJ3L85 T/R13 - 13 inch reel, 10K units per reel

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