



# Frontier Electronics Corp.

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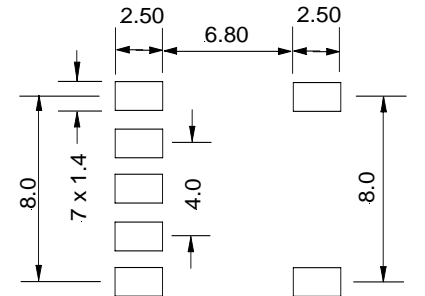
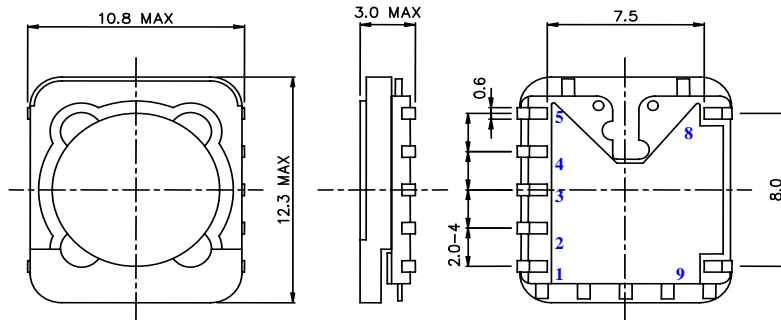
Web: frontierusa.com

## CCFL Inverter Transformer—TSS1230F-01

### A. Specification:

Part No.	Mark	Suitable Frequency	Max. Open Voltage	Max. Lamp Watt.	Efficiency
TSS1230F-01	TSS1230F-01	90KHz~140KHz	750 V rms.	1.2W	75%

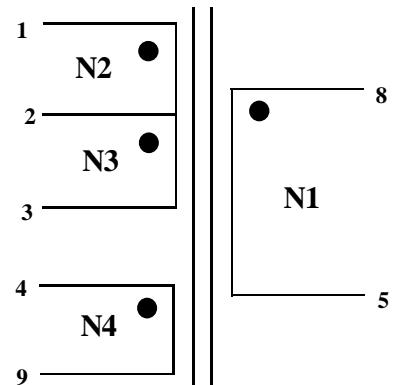
### B. Schematics and Mechanical dimensions: (Unit: mm)



Recommended Foot Patter

### C. Electrical Data:

Winding	Start	Finish	L (@ 100KHz, 1.0V)	DCR Ω (@ 25°C)
N1	8	5	60.0 mH ± 15 %	270 ± 20 %
N2	1	2	11.0 uH ± 15 %	0.550 ± 20 %
N3	2	3	11.0 uH ± 15 %	0.550 ± 20 %
N4	4	9	0.67 uH ± 15 %	0.170 ± 20 %



Turn ratio: N2: N1 = N3: N1 = 1: 110

### D. Insulation:

Term	Item	Spec.	Condition
Hi-Pot	Coil to Coil	500 VAC / 1 Minute	@Cut off current=3mA
Hi-Pot	Coil to Core	500 VAC / 1 Minute	
Isolation	Coil to Coil	100 MOHM Min.	@ 100 VDC

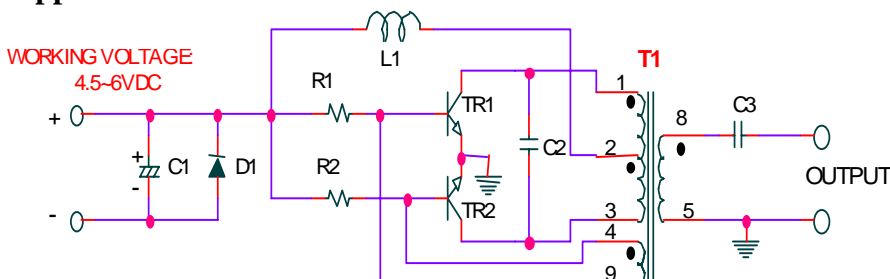
### E. Features:

- Low profile height: Maximum 3.0mm.
- Drum / Ring type: Ferrite core (Ni - Zn).
- High efficiency.
- Surface mount.
- Suitable for standard IR re-flows soldering.

### F. Uses:

- Back Light power supplies transformer available.
- FL Inverter.
- PDA Inverter.

### G. Applicant Circuit:



FONTIER ELECTRONICS		
Part List for Demo Circuit		
Parts	Package	Spec
R1	0805	2.2K
R2	0805	2.2K
C1		22uF/25V
C2		22nF/250V
C3		18pF/3KV
TR1	SC-51	2SC2655
TR2	SC-51	2SC2655
DI	DO41	1N4004
L1	CSN075F	CSN075F-470M
T1	TSS1230F	TSS1230F-01

Note: **RoHS** compliant; for the **ROHS** parts, we add “-LFR” at the end of the P/N.