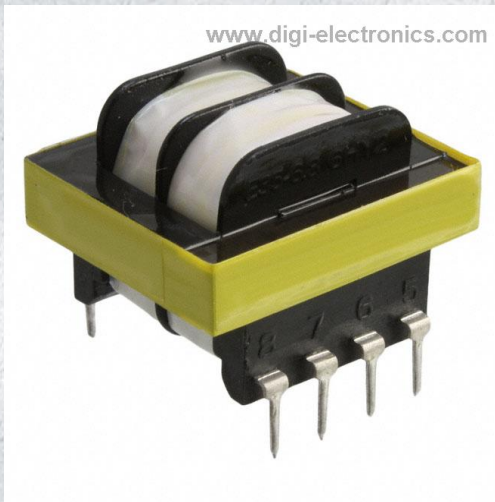


# 3FS-220 Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	3FS-220-DG
Manufacturer	<a href="#">Tamura</a>
Manufacturer Product Number	3FS-220
Description	PWR XFMR LAMINATED 1.1VA TH
Detailed Description	Transformers

This model 3FS-220 is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

3FS-220

Series:

3FS-2xx

Type:

Laminated Core

Voltage - Secondary (Full Load):

Parallel 10V, Series 20V

Primary Winding(s):

Single

Center Tap:

No

Mounting Type:

Through Hole

Size / Dimension:

35.56mm L x 31.00mm W

Voltage - Isolation:

2500Vrms

Manufacturer:

Tamura

Product Status:

Active

Voltage - Primary:

115V

Current - Output (Max):

Parallel 110mA, Series 55mA

Secondary Winding(s):

Dual

Power - Max:

1.1VA

Termination Style:

PC Pin

Height - Seated (Max):

25.40mm

Weight:

-

## Environmental & Export classification

RoHS Status:

RoHS Compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8504.31.4035

REV. Status
REVISION - 05-08-96 TS
REVISION A REFORMATTED 08/14/96 TS
REVISION B REFORMATTED 08/20/96 TS
REVISION C REFORMATTED 7-14-97 TS
REVISION D CHANGED A.7. 8-23-99 TS
REVISION E ADDED RoHS 1-12-06 MP
REVISION F SAFETY UPDATE 6-24-09 MP
REVISION G CHANGED PHONE# 11-22-19 MP

THREE FLANGE SINGLE PRIMARY 1.1VA PC BOARD POWER TRANSFORMER

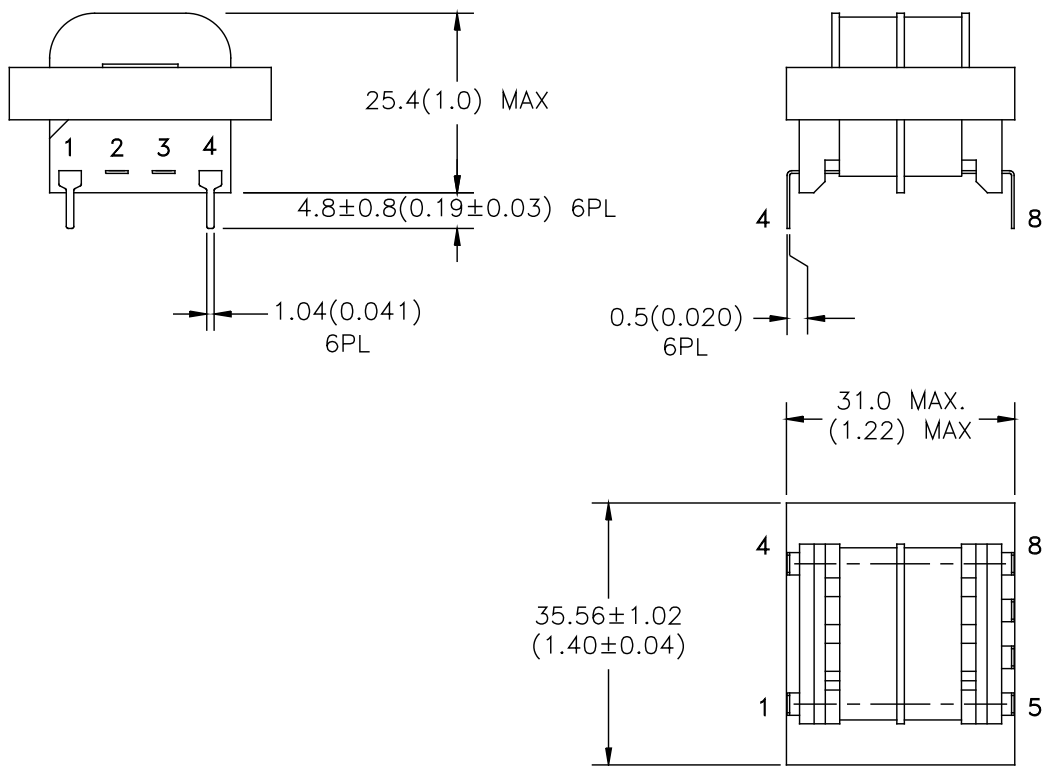
A. Electrical Specifications (@ 25°C)

1. Maximum Power: 1.1VA
2. Input Voltage and Frequency: 115V 50/60 Hz
3. Secondary Voltage: See Table A
4. Voltage Regulation: 24% TYP @ full load to no load
5. Temperature Rise: 35°C TYP (45°C MAX allowed)
6. Insulation Resistance:  
100 MΩ MIN @ 500VDC, Pri to Sec, Pri to Core  
100 MΩ MIN @ 500VDC, Sec to Core
7. Hi-Pot: 2500 Vrms 1 minute @ Pri to Sec  
1500 Vrms 1 minute @ Pri to Core  
1500 Vrms 1 minute @ Sec to Core  
500 Vrms 1 minute @ Sec to Sec

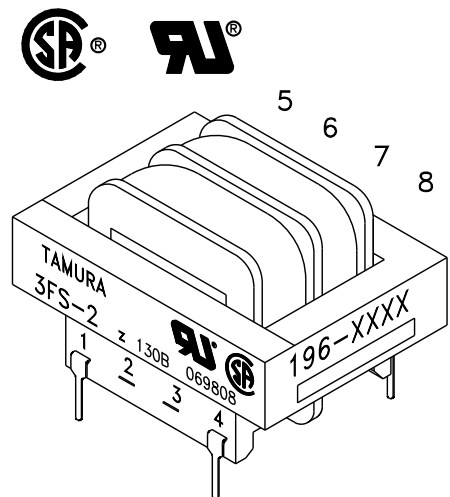
B. Marking: TAMURA, Tamura part number (see sheet 2), MICROTRAN, Microtran part number (see sheet 2), date code, country of origin, safety logos and input and output ratings

- C. Safety:
- Insulation Class B (130°C) File No. E92957.
  - CSA 22.2 No. 66-1988, File No. 069808.
  - UL 1585, Class 2 or 3, Inherently limited, File No. E95844.
  - UL 506, General Purpose, File No. E91239.

D. Mechanical Specifications:



MODEL NUMBER  
3FS-2XX & PSS2-XX



PREPARED BY:  
C. POPPE

ENGINEER:  
M. PITCHAI

SAFETY ENGINEER

APPROVED:  
M. PITCHAI

DRAWING CONTROL NO. P-A1-11031	REV G	MODEL DESCRIPTION SIZE 2 SF3 & PSS FAMILY POWER TRANSFORMER	MODEL SPECIFICATION 3FS-2XX & PSS2-XX
CONTENTS OF THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE		<b>TAMURA CORPORATION OF AMERICA</b> 1040 SOUTH ANDREASEN DRIVE, #100 ESCONDIDO, CA. 92029 (760) 871-2009	DIM: mm[In]   SCL: NONE   Sh: 1 OF 2
PROPRIETARY NOTICE: THIS DRAWING PRINT OR DOCUMENT AND SUBJECT MATTER DISCLOSED HEREIN ARE PROPRIETARY ITEMS TO WHICH TAMURA RETAINS THE EXCLUSIVE RIGHT OF DISSEMINATION, REPRODUCTION, MANUFACTURE AND SALE. THIS DRAWING, PRINT OR DOCUMENT IS SUBMITTED IN CONFIDENCE FOR CONSIDERATION BY THE RECIPIENT ALONE UNLESS PERMISSION FOR FURTHER DISCLOSURE IS EXPRESSLY GRANTED IN WRITING.			

REV. Status

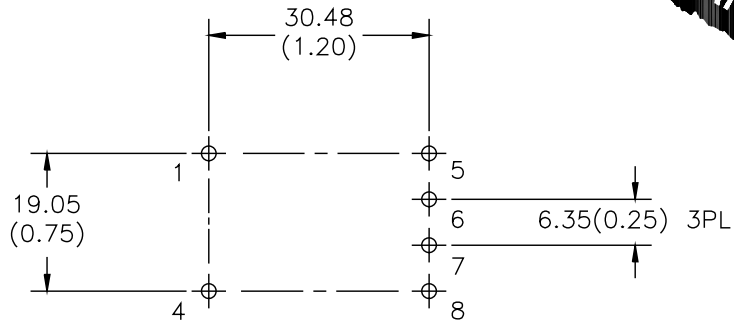
SEE SHEET  
1 OF 2 FOR  
REVISION HISTORY

E. Mounting Footprint:

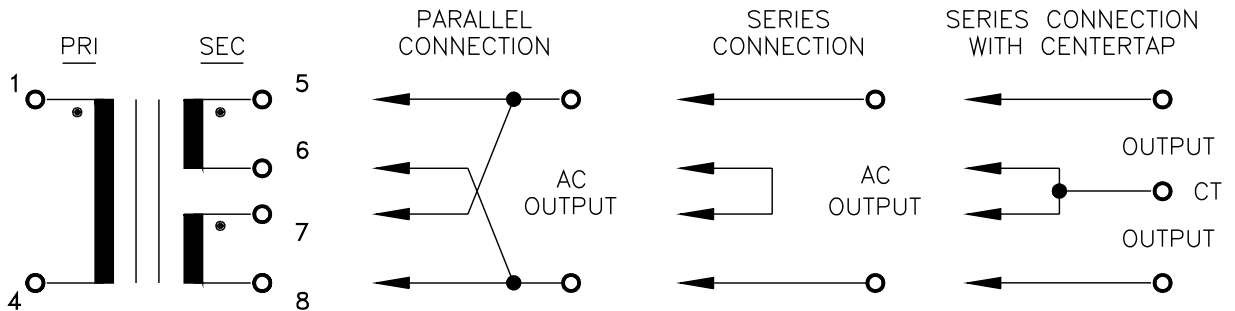


MODEL NUMBER

3FS-2XX & PSS2-XX



F. Schematic Diagram:



\*not UL - recognized for series connect.

G. Table A: (NOTE: all parts are dual marked with both part numbers)

TAMURA PART NO.	MICROTRAN PART NO.	PARALLEL CONNECTION		SERIES CONNECTION		SERIES CONNECTION WITH CT	
		AC VOLTS	RMS AMPS	AC VOLTS	RMS AMPS	AC VOLTS	RMS AMPS
3FS-210	PSS2-10	5.0	0.220	10.0	0.110	5.0-CT-5.0	0.110
3FS-212	PSS2-12	6.3	0.180	12.6	0.090	6.3-CT-6.3	0.090
3FS-216	PSS2-16	8.0	0.140	16.0	0.070	8.0-CT-8.0	0.070
3FS-220	PSS2-20	10.0	0.110	20.0	0.055	10.0-CT-10.0	0.055
3FS-224	PSS2-24	12.0	0.090	24.0	0.045	12.0-CT-12.0	0.045
3FS-228	PSS2-28	14.0	0.080	28.0	0.040	14.0-CT-14.0	0.040
3FS-236	PSS2-36	18.0	0.060	36.0	0.030	18.0-CT-18.0	0.030
3FS-248	PSS2-48	24.0	0.046	48.0	0.023	24.0-CT-24.0	0.023
3FS-256	PSS2-56	28.0	0.040	56.0	0.020	28.0-CT-28.0	0.020
3FS-2120	PSS2-120	60.0	0.020	120.0*	0.010	60.0-CT-60.0	0.010

PREPARED BY:

C. POPPE

ENGINEER:

M. PITCHAI

SAFETY ENGINEER

DRAWING CONTROL NO. P-A1-11031  
REV G

MODEL DESCRIPTION  
SIZE 2 3FS & PSS FAMILY  
POWER TRANSFORMER  
**TAMURA CORPORATION OF AMERICA**  
1040 SOUTH ANDREASEN DRIVE, #100 ESCONDIDO, CA. 92029  
(760) 871-2009

MODEL SPECIFICATION  
3FS-2XX & PSS2-XX

DIM: mm[In] SCL: NONE Sh: 2 OF 2

APPROVED:

M. PITCHAI

PROPRIETARY NOTICE: THIS DRAWING PRINT OR DOCUMENT AND SUBJECT MATTER DISCLOSED HEREIN ARE PROPRIETARY ITEMS TO WHICH TAMURA RETAINS THE EXCLUSIVE RIGHT OF DISSEMINATION, REPRODUCTION, MANUFACTURE AND SALE. THIS DRAWING, PRINT OR DOCUMENT IS SUBMITTED IN CONFIDENCE FOR CONSIDERATION BY THE RECIPIENT ALONE UNLESS PERMISSION FOR FURTHER DISCLOSURE IS EXPRESSLY GRANTED IN WRITING.

## OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.