



TS2 P 7 F 26 - BPEK

TS2 Series

Connector Type:
P - Panel, Front-Mount

of contacts:
2-5 for #20
6-9 for #26

Gender:
M - Male (Pin)
F - Female (Socket)

Options:
B - Panel, Rear-Mount
P - PC Contacts, straight tails
E - Epoxy seal
K - Kit Packaging (one unit/bag)
[blank] - Bulk Packaging
 Consult factory for other options

Contact Size:
20 - 20, 22, 24, 26 AWG wires
26 - 26, 28, 30 AWG wires

Refer to TS2C SERIES drawing for mating Cable-End connectors.

SPECIFICATIONS:	
MECHANICAL	
Mating / Locking Type:	Threaded Coupling
Life	5,000 cycles minimum
Operating Forces	10 lb. [44.5 N] maximum Insertion or Withdrawal
Vibration	Mil-Std 202G Method 201A
Panel-Mount Hex Nut Tongue	40 in-lb [4.5 Nm] maximum
Cable Securing System:	Threaded on metal Clamp
ELECTRICAL	
Voltage Rating	125 V AC/DC for 2-5 contact arrangements 30 V AC/DC for 6-9 contact arrangements
Current Rating	Refer to Current Carry Capacity Table
Insulation Resistance	1000 MΩ minimum
Contact Resistance	10 mΩ typical
EMI Shielding	360°
ENVIRONMENTAL	
Temperature Limits	-40°C to +135°C (-40°F to +275°F)
Operating Temperature Range	Refer to Current Carry Capacity Table
Moisture Resistance	Mil-Std 202G Method 106G
Insulation Resistance	Mil-Std 202G Method 302
Thermal Shock	Mil-Std 202G Method 107G
Salt Atmosphere (Corrosion)	Mil-Std 202G Method 101E
Ingress Protection Ratings	IP66, IP67, IP68 (6 ft. for 24 hours) per IEC60529, NEMA 250 6P
MATERIAL	
Outer Shell Metal components	Copper Alloy, electroless nickel plated
Hex Nut & Inner Metal components	Copper Alloy, nickel plated
Electrical Insulator	Medical Technology LCP, natural
Seal O-rings	Thermoplastic Elastomer
Contacts Assembly	Copper Alloy, gold plated with Stainless Steel locking clip
Epoxy	Silicone Potting Compound



Contacts	Wire (awg)	Current Rating (A) at Operating Temperature (°C)					Minimum Test Voltage (V rms)	Voltage (V rms) tested per UL2238
		45°C max.	65°C max.	85°C max.	100°C max.	110°C max.		
2 #20	20	10	9	8	7*	6	1300	125
	22	8.5	7.5	7.5	5.5*	4.5		
	24	7	6	5	4.5*	3.5		
	26	4	4	3.5	3.5*	2.5		
3 #20	20	9.5	8.5	7.5	6.5*	5		
	22	8	7	6	5*	4		
	24	6	5.5	4.5	4*	3		
	26	3.5	3.5	3	3*	2.5		
4 #20	20	9	8	7	6*	5		
	22	7.5	6.5	5.5	4.5*	3.5		
	24	5	4.5	4	3.5*	2.5		
	26	3	3	2.5	2.5*	2		
5 #20	20	8	7.5	6.5	5.5*	4.5		
	22	6.5	5.5	5	4*	3		
	24	4.5	4	3.5	3*	2.5		
	26	2.5	2.5	2	2*	1.5		
6-7 #26	26	2.5	2.5	2	2*	1.5		
	28	2	2	1.5	1.5*	1		
	30	1.5	1.5	1	1*	.5		
	26	2	2	1.5	1.5*	1		
8-9 #26	28	1.5	1.5	1	1*	.5		
	30	1	1	.5	.5*	.5		
	26	2	2	1.5	1.5*	1		
	28	1.5	1.5	1	1*	.5		

*Temperature Rise does not exceed 30°C when tested according to UL2238. All other recommended current ratings are based on the Relative Thermal Index of the insulating material.

ALL DIMENSIONS FOR REFERENCE ONLY

CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED					THIS DRAWING DESCRIBES A DESIGN CONSIDERED PROPRIETARY IN NATURE, DEVELOPED AND MANUFACTURED BY SWITCHCRAFT INC. AND IS RELEASED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.				
1. ALL DIMENSIONS IN INCHES [mm]					SIZE	WIDTH	MULT	LBS/M	TEMPER
- TWO PLACE DECIMALS ±0.02 [0.5]					FINISH		MATERIAL		
- THREE PLACE DECIMALS ±0.005 [0.13]					SPEC No.		SPEC No.		
					FIRST USED ON		SCALE		
							3:1		
0A	PRELIMINARY	11/09/16	PNK	SRC	DATE DRAWN	BY	CHKD	APVD	Switchcraft®
REV	ECO NUMBER	DATE	BY	APVD	11/09/16	PNK	11/09/16	11/09/16	
REVISIONS					NAME		PART No.		SHEET 1 OF 2
DO NOT SCALE DRAWING					PC, REAR PANEL-MOUNT TS2 SERIES CONNECTOR, RoHS		TS2P_-BPE SERIES		
					SolidWorks CAD File				



2 - 5 #20 PIN ARRANGEMENTS
 #20 PC TAIL DIA.: 0.039±0.001
 RECOMMENDED PCB HOLE SIZE: 0.046±0.001 [1.17±0.03]



6 - 9 #26 PIN ARRANGEMENTS
 #26 PC TAIL DIA.: 0.020±0.001
 RECOMMENDED PCB HOLE SIZE: 0.026±0.001 [0.66±0.03]

SCALE 3:1	Switchcraft®	
DATE DRAWN 11/09/16		
DRAWN BY PNK	PART No. TS2P_-BPE SERIES_CD	REV 0A

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