

# Dual staked MIL-STD 1553 Interface Transformers - SBIT x 7.8P



- In accordance to MIL-STD 1553 B
- Meet all the electrical requirements of ManchesterII serial bi-phase data transmission, 1 MHz operation
- Epoxy molding in accordance with outgassing requirements of ECSS-Q-70-02, MILT 21038
- Open-circuit impedance greater than  $3\text{ k}\Omega$  ( $4\text{ k}\Omega$  typical value) from 75 KHz to 1 MHz
- Frequency range 75 KHz to 1 MHz
- Operating temperature range:  $-55\text{ }^\circ\text{C}$  to  $+125\text{ }^\circ\text{C}$
- Weight:  $< 5$  grams

## Electrical Data (25°C)

Parameter	Unit	SBIT 1 7.8P	SBIT 2 7.8P	SBIT 3 7.8P	SBIT 5 7.8P	SBIT 7 7.8P	SBIT 8 7.8P
<b>Frequency Response</b>							
Operating Range	kHz	75 to 1000	75 to 1000	75 to 1000	75 to 1000	75 to 1000	75 to 1000
Common-Mode Rejection (min)	dB	45	45	45	45	45	45
<b>Electrical Requirements</b>							
Terminal Winding Resistance Rdc							
• 1-3 (max)	$\Omega$	2.8	2.8	2.8	2	2.8	2.2
• 4-8 (max)	$\Omega$	3	3.5	3	3.5	3	3.5
Interwinding Capacitance (max)	pF	50	50	50	50	50	50
Winding Inductance							
• LM (min) (1-3)	mH	7.0	7.0	7.0	7.0 (4-8)	8.0	7.0 (4-8)
• LL (max)	$\mu\text{H}$	6.0	6.0	6.0	6.0	6.0	6.0
<b>Turns Ratios</b>							
Terminals							
• 1-3 : 4-8		1.4 : 1	1 : 1	1.20 : 1	1 : 2.5	1.25 : 1	1 : 2.12
• 1-3 : 5-7		2 : 1	1 : 0.707	1.67 : 1	1 : 1.79	1.66 : 1	1 : 1.5

## To Order

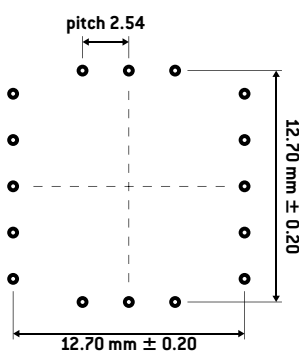
SBIT	#	7.8	P
Range	Part 1 to 8 except 4 and 6	Case height 7.8	P pins through hole

SBIT # 7.8P

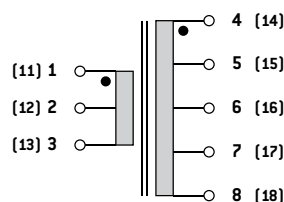
## Notes

Interwinding insulation: 500Vrms-500Hz.  
Flammability compliance: UL94V0

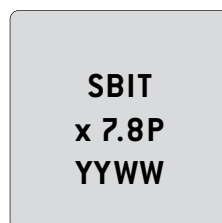
## PCB Layout (suggested)



## Connections



## Marking



yyww :  
Date code

## Typical Dimensions (mm)

