

# MIL-STD 1553 Interface Transformers

## DBIT x 3 S



- In accordance to MIL-STD 1553 A & B
- Meet all the electrical requirements of Manchester II serial bi-phase data transmission, 1 MHz operation
- Epoxy molding in accordance with outgassing requirements of ECSS-Q-ST-70-02C
- Qualified EPPL issue 22 2012-12-17
- Open-circuit impedance greater than 3 kΩ (4 kΩ typical value) from 75 kHz to 1 MHz
- Frequency range 75 kHz to 1 MHz
- Operating temperature range: -55°C to +125°C
- Weight: 3 to 3.5 grams

### Electrical Data (25°C)

ID Code	Turn ratio 1-3: 4-8	Turn ratio 1-3: 5-7	R <sub>DC</sub> max. (Ω) [1-3]	R <sub>DC</sub> max. (Ω) [4-8]	Primary Inductance (mH) min at 75 kHz-1V
DBIT 1 3S	1.4: 1	2: 1	3	2.3	Lp (1-3) ?
DBIT 2 3S	1: 1	1: 0.707	3	3.3	Lp (1-3) ?
DBIT 3 3S	1.2: 1	1.67: 1	3	2.7	Lp (1-3) ?
DBIT 4 3S	1: 2.5	1: 1.74	1.5	3.5	Lp (4-8) ?
DBIT 5 3S	1: 2.5	1: 1.79	1.5	3.5	Lp (4-8) ?
DBIT 6 3S	2.3: 1	3.2: 1	3	1.5	Lp (1-3) ?
DBIT 7 3S	1.25: 1	1.66: 1	3	3.3	Lp (1-3) ?
DBIT 8 3S	1: 2.12	1: 1.5	1.8	3.5	Lp (4-8) ?

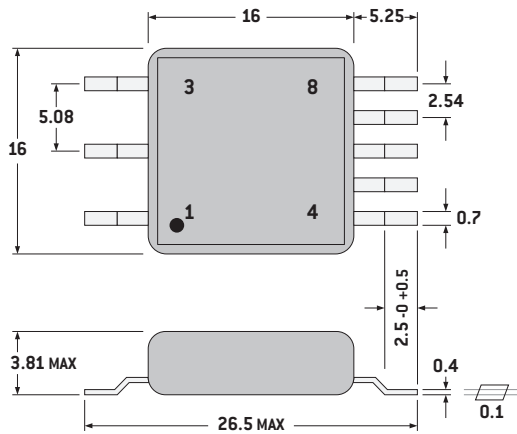
### To Order

DBIT	#	3	S
Range	Transceiver type	Case height 3	SSMD

DBIT # 3S

### Typical Dimensions

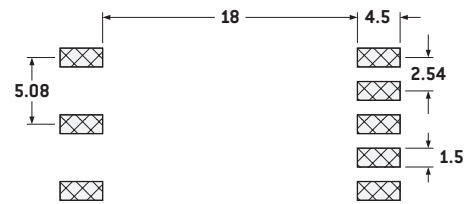
(mm, top view)



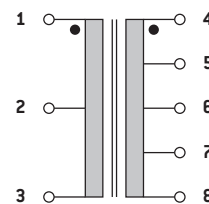
### Notes

- Common mode rejection: 45 dB min.
- Dielectric withstanding voltage: 100 V<sub>RMS</sub>.
- Insulation resistance: 1000 MΩ min.
- Tolerance ratio ± 3 %.

### PCB Layout (suggested)

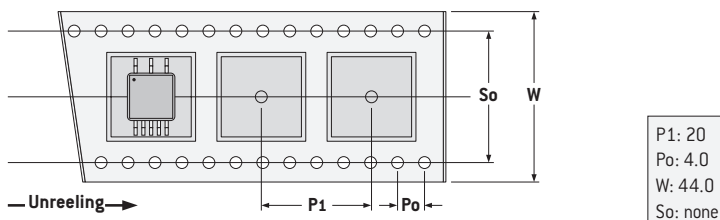


### Connections

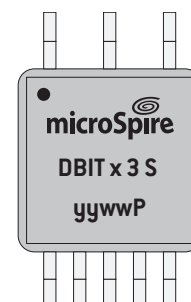


### Packaging

Individually packed: 32 parts on 2 layers.  
Tape and Reel:  
700 units per reel of diameter 330 mm



### Marking



yyww:  
Date code