

MIL-STD 1553 Interface Transformers

DBIT x 5 S(A)



- 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
- Open-circuit impedance greater than 4 kΩ over 75 kHz to 1 MHz working frequency
- Frequency range 75 kHz to 1 MHz
- Operating temperature range: -55°C up to +150°C (for 5SA only)
- 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 _{DC} max. (Ω) 1-3 | R _{DC} max. (Ω) 4-8 | Primary Inductance (mH) min at 75 kHz-1V | Open Circuit Impedance Min (kΩ) | Operating Temperature range |
|------------|---------------------|---------------------|------------------------------|------------------------------|--|---------------------------------|-----------------------------|
| DBIT 1 5S* | 1,4:1 | 2:1 | 2,2 | 1,2 | 7 (1-3) | 3 | -55°C +125°C |
| DBIT 2 5S* | 1:1 | 1:0,707 | 2,2 | 2,4 | 7 (1-3) | 3 | -55°C +125°C |
| DBIT 3 5S* | 1,2:1 | 1,67:1 | 2,2 | 2 | 7 (1-3) | 3 | -55°C +125°C |
| DBIT 4 5S* | 1,2:5 | 1:1,74 | 1,2 | 2,7 | 7 (4-8) | 3 | -55°C +125°C |
| DBIT 5 5S* | 1:2,5 | 1:1,79 | 1,2 | 2,7 | 7 (4-8) | 3 | -55°C +125°C |
| DBIT 6 5S* | 2,3:1 | 3,2:1 | 2,2 | 1,2 | 7 (1-3) | 3 | -55°C +125°C |
| DBIT 7 5S* | 1,25:1 | 1,66:1 | 2,2 | 2 | 7 (1-3) | 3 | -55°C +125°C |
| DBIT 8 5S* | 1:2,12 | 1:1,5 | 1,2 | 2,7 | 7 (4-8) | 3 | -55°C +125°C |
| DBIT 1 5SA | 1,4:1 | 2:1 | 1,23 | 1,1 | 7 (1-3) | 4 | -55°C +150°C |
| DBIT 2 5SA | 1:1 | 1:0,707 | 1,23 | 1,6 | 7 (1-3) | 4 | -55°C +150°C |
| DBIT 3 5SA | 1,2:1 | 1,67:1 | 1,23 | 1,4 | 7 (1-3) | 4 | -55°C +150°C |
| DBIT 5 5SA | 1:2,5 | 1:1,79 | 0,6 | 1,4 | 7 (4-8) | 4 | -55°C +150°C |
| DBIT 6 5SA | 2,3:1 | 3,2:1 | 1,23 | 0,8 | 7 (1-3) | 4 | -55°C +150°C |
| DBIT 7 5SA | 1,25:1 | 1,66:1 | 1,23 | 1,25 | 7 (1-3) | 4 | -55°C +150°C |
| DBIT 8 5SA | 1:2,12 | 1:1,5 | 0,7 | 1,4 | 7 (4-8) | 4 | -55°C +150°C |

* EPPL products - Detail Specifications MSP003

Notes

Common mode rejection : 45 dB min.
 Dielectric withstanding voltage : 500 V_{RMS}.
 Insulation resistance : 1,3 - 4,8 500 V_{DC} >1000 MΩ
 Tolerance ratio ± 3 %.

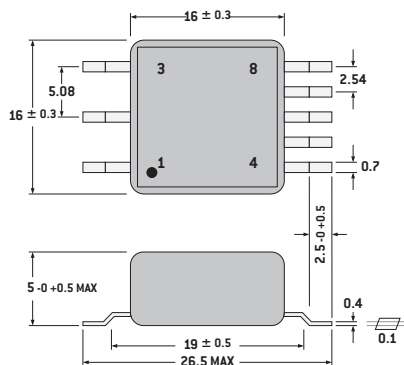
To Order

| DBIT | # | 5 | S | A |
|-------|-------------|---------------|-------|-------------|
| Range | Part 1 to 8 | Case height 5 | S SMD | New version |

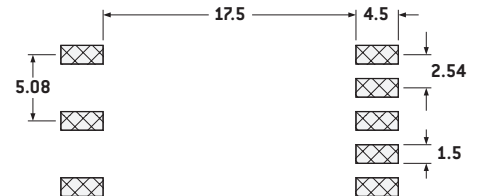
DBIT # 5SA

Typical Dimensions

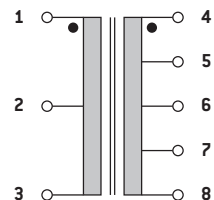
(mm, top view)



PCB Layout (suggested)

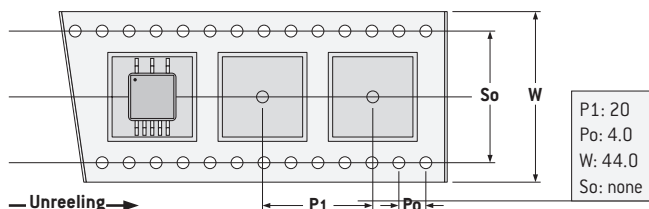


Connections



Packaging

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



P1: 20
 Po: 4.0
 W: 44.0
 So: none

Marking



yyww: Date code