RB Modules



Applications

Grounding and wiring integration devices for commercial/military aircraft.

Standards



Characteristics Material

- Ground block body: aluminum alloy
- Feed back modules body: polyphenylene sulfide (PPS)
- Ground track body : PPS
- · Ground block cap and insert : PPS
- Grommet and ground track strain : silicone rubber
- Relief grommet contact : copper alloy

Protection

• Contact gold (1.27μm) over nickel (1,91 μm)

Mechanical

 Magnetic permeability: materials do not exhibit a relative magnetic permeability of greater than 2, in accordance with MIL-T-81714, para 4.6.15

- Contact retention: size 16-20: 88,9 N size 14-16: 112,2 N
- Probe damage :
- in accordance with MIL-T-81714 para 4.6.2
- Endurance: 100 cycles of mating and unmating

Electrical

- Contact resistance : size 16-20 : 9 m Ω size 14-16 : 5 m Ω
- Withstanding voltage :
- 1500 VRms in accordance with MIL-T 81714
- 600 VRms in accordance with MIL-T 81714
- Insulation resistance : 5000 MΩ (feedback modules only)
- Insulation resistance : $50~M\Omega$ after (elevated temperature) 1000 hours at 150°C feedback modules only

Description

- RB series meet the electrical, mechanical and environmental performances criteria of MIL-J-81714.
- The system provides a large number of ground terminations within close proximity to signal wires («HERF» requirements).
- Modules available in five buss configurations and designed to accommodate # 16 and # 20 AWG cables terminated with M39029 contacts.
- Program switch module contains 2, 12 positions single pole, single throw DIP switches in a sealed compartment that is accessed by removing captured sealing plugs.
- Other switches such as SEDT, DPBT, DPST and 4PST can also be accommodate.

Climatical

Resistance to salt spray

humidity vibration shock

in accordance with MIL-T-81714

thermal shock — temperature: 1000 hours at 150°C

Ordering information
Ground & Mounting track, ground block, and feedback module

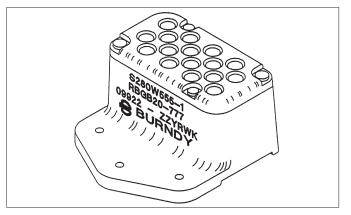
| FCI Burndy Part number | Boeing Part number | Description |
|---------------------------|-----------------------|--|
| RBGB20-777 | S280W555-1 | Ground block module - 16 x 20 AWG |
| RBGB16-777 | S280W555-2 | Ground block module - 12 x 16 AWG |
| RBTB20-2 | S280W555-102 | Terminal feedback module - 2 x 8 bus - 20 AWG |
| RBTB20-4 | S280W555-104 | Terminal feedback module - 4 x 4 bus - 20 AWG |
| RBTB20-8 | S280W555-108 | Terminal feedback module - 8 x 2 bus - 20 AWG |
| RBTB16-3 | S280W555-203 | Terminal feedback module - 3 x 4 bus - 16 AWG |
| RBTB16-6 | S280W555-206 | Terminal feedback module - 6 x 2 bus - 16 AWG |
| RBGT2W | S280W555-502 | Terminal module ground track - 2.00 in. |
| RBGT4W | S280W555-504 | Terminal module ground track - 4.00 in. |
| RBGT6W | S280W555-506 | Terminal module ground track - 6.00 in. |
| RBGT10W | S280W555-510 | Terminal module ground track - 10.00 in. |
| RBGT14W | S280W555-514 | Terminal module ground track - 14.00 in. |
| RBGT16W | S280W555-516 | Terminal module ground track - 16.00 in. |
| RBGT22W | S280W555-522 | Terminal module ground track - 22.00 in. |
| RBGT26W | S280W555-526 | Terminal module ground track - 26.00 in. |
| RBMT2 | S280W555-602 | Terminal module ground track - 2.00 in. |
| RBMT4 | S280W555-604 | Terminal module ground track - 4.00 in. |
| RBMT6 | S280W555-606 | Terminal module ground track - 6.00 in. |
| RBMT10 | S280W555-610 | Terminal module ground track - 10.00 in. |
| RBMT14 | S280W555-614 | Terminal module ground track - 14.00 in. |
| RBMT16 | S280W555-616 | Terminal module ground track - 16.00 in. |
| RBMT22 | S280W555-622 | Terminal module ground track - 22.00 in. |
| RBMT26 | S280W555-626 | Terminal module ground track - 26.00 in. |
| RBD20-1 | S280W555-751 | Terminal diode module - JANTX1N6818 |
| RBD20-3 | S280W555-753 | Terminal diode module - JANTX1N5553 |
| RBR20-2 | S280W555-702 | Terminal resistor module - RLR07C4301 FR |
| RBR20-3 | S280W555-703 | Terminal resistor module - RLR07C1202 FR |
| RBR20-4 | S280W555-704 | Terminal resistor module - RLR07C4992 FR |
| RBR20-5 | S280W555-705 | Terminal resistor module - Mat disp brightness control |
| RBM20M-1DJ5 | | M39029/1-101 pin contact - size 16-20 |
| RBM18M-1DJ5 | | M39029/1 special pin contact - size 16-18 |
| RBM16V-1DJ5 | | M39029/1-102 pin contact - size 14-16 |
| RBM12Z-1DJ5 | | M39039/1-103 pin contact - size 12-12 |

RB Modules

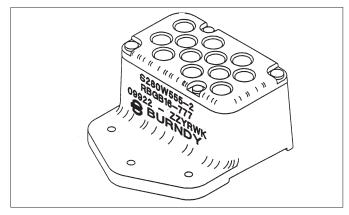
Rack & panel and right angle mounting ground blocks and program switch module

| FCI Burndy Part number | Boeing Part number | Description |
|---------------------------|--------------------------------|--|
| RBGP16-1 RBGP48-1 | | Rack and panel mounting ground block Rack and panel mounting ground block |
| RBGP104-1 | | Rack and panel mounting ground block |
| RBGS16-1 RBGS32-1 | \$280W555-401 \$280W555-402 | Right angle mounting ground shelf strip Right angle mounting ground shelf strip |
| RBDSC-1 | | Program switch module |

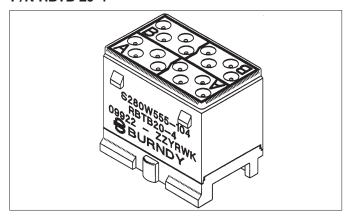
Ground block assembly P/N RBGB 20-777



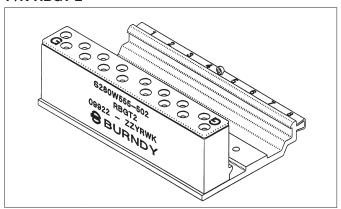
P/N RBG 16-777

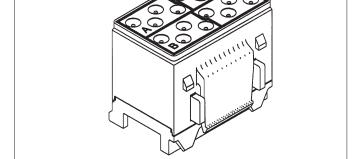


Feedback module P/N RBTB 20-4

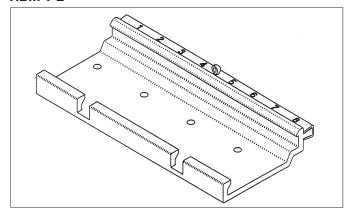


Grounding track assembly P/N RBGT 2



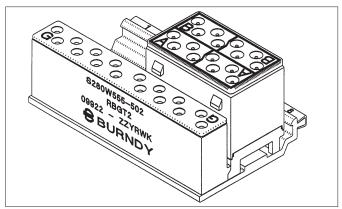


Mounting track assembly RBM T 2

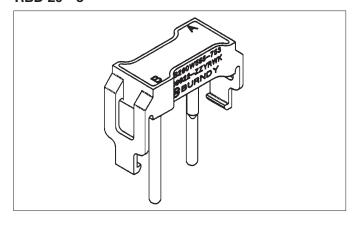


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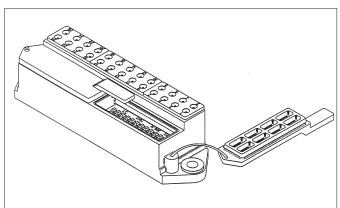
Feedback module mounted in grounding track RBG T2 / RBT B 20 - 4



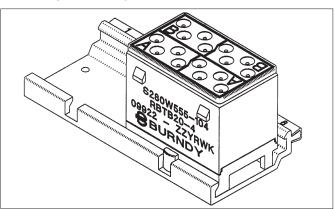
Diode / resistor module assembly RBD 20 - 3



Program switch module RBDSC - 1



Feedback module mounted in mounting track RBM T 2 / RB T B 20 - 4



Feedback module mounted in track with resistor module RBM T 2 / RBR 20 - 3 / RBT B 20 - 4

