

# HPFS-1550-□□-1×N

## 1550nm High Power Fiber Optical Splitter

### PRODUCT DESCRIPTION

HPFS-1550 series high power fiber optical splitter and adopt special process of fused bi-conical taper technology and good heat treatment. It can be applied by divided high performance and high reliability to multi-port optical power distribution of 1550nm high power laser light source. The maximum pass power is 50W (47dBm). The feature of the product is high stability, high uniformity, low polarization dependent loss and low excess loss.

HPFS-1550-10-1×N 1550nm, pass power is 10W(40dBm), 1×N.

HPFS-1550-20-1×N 1550nm, pass power is 20W(43dBm), 1×N.

HPFS-1550-50-1×N 1550nm, pass power is 50W(47dBm), 1×N.

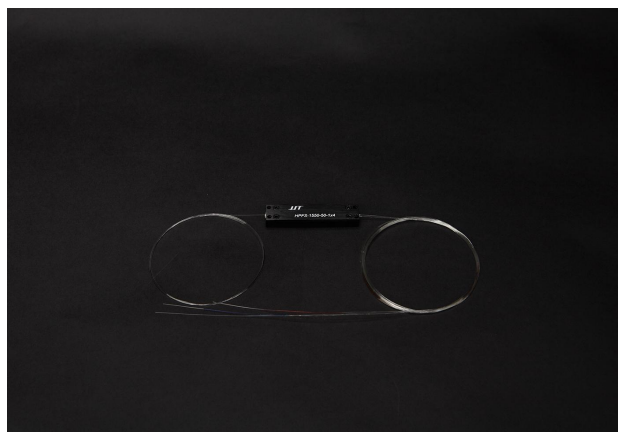
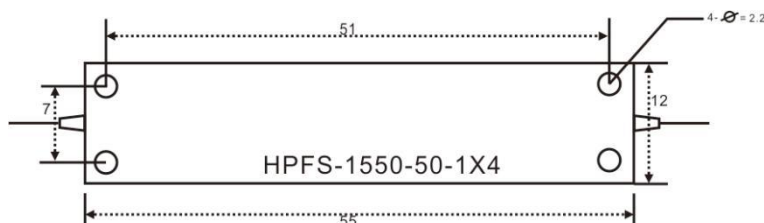
### PRODUCT FEATURE

- ▶ 50W High Power Handling.
- ▶ Low Insertion Loss.
- ▶ High Stability & Reliability.
- ▶ High Uniformity..

### MAIN APPLICATION

- ▶ CATV High Power Optical Amplifier.
- ▶ FTTx PON.
- ▶ High Power Fiber Laser.
- ▶ Medical and Biotech.
- ▶ Telecom munications.
- ▶ Fiber Optic Instrumentation.
- ▶ laboratory application.

### DIMENSIONS



## TECHNIQUE INDEX

| Performance                 |       | Index        |      |      | Supplement       |
|-----------------------------|-------|--------------|------|------|------------------|
|                             |       | Min.         | Typ. | Max. |                  |
| Operation Wavelength        | (nm)  | 1530         |      | 1565 | HPFS-1550        |
| Ratio                       | (1xN) |              | 1×2  |      | HPFS-1550-□□-1×2 |
|                             |       |              | 1×3  |      | HPFS-1550-□□-1×3 |
|                             |       |              | 1×4  |      | HPFS-1550-□□-1×4 |
|                             |       |              | 1×5  |      | HPFS-1550-□□-1×5 |
| Pass Power                  | (W)   |              |      | 10   | HPFS-1550-10     |
|                             |       |              |      | 20   | HPFS-1550-20     |
|                             |       |              |      | 50   | HPFS-1550-50     |
| Insertion Loss              | (dB)  |              | 3.1  | 3.2  | 1×2              |
|                             |       |              | 4.85 | 5.1  | 1×3              |
|                             |       |              | 6.3  | 6.4  | 1×4              |
|                             |       |              | 7.4  | 7.6  | 1×5              |
| Uniformity                  | (dB)  |              | 0.06 | 0.1  | 1×2              |
|                             |       |              | 1.00 | 0.15 | 1×3              |
|                             |       |              | 0.15 | 0.20 | 1×4              |
|                             |       |              | 0.20 | 0.3  | 1×5              |
| Polarization Dependent Loss | (dB)  |              |      | 0.02 | 1×2              |
|                             |       |              |      | 0.04 | 1×3              |
|                             |       |              |      | 0.05 | 1×4              |
|                             |       |              |      | 0.06 | 1×5              |
| Directivity                 | (dB)  | 55           |      |      |                  |
| Fiber length                | (m)   |              | 1.0  |      |                  |
| Fiber type                  |       | SMF-28.280μm |      |      | bare fiber       |
| Operating Temp              | (°C)  | -40          |      | 80   |                  |
| Storage Temp                | (°C)  | -40          |      | 85   |                  |

|      |      |         |         |
|------|------|---------|---------|
| Size | (nm) | 55×12×8 | (L×W×H) |
|------|------|---------|---------|

## PRODUCT SERIES

| Model             | operating wavelength | Max.Pass Power | Ratio | Insertion Loss | Uniformity |
|-------------------|----------------------|----------------|-------|----------------|------------|
| HPFS-1550-10 -1×2 | 1550nm               | 10W<br>(40dBm) | 1×2   | ≤3.2dB         | ≤0.1dB     |
| HPFS-1550-10 -1×3 |                      |                | 1×3   | ≤5.1dB         | ≤0.15dB    |
| HPFS-1550-10 -1×4 |                      |                | 1×4   | ≤6.4dB         | ≤0.2dB     |
| HPFS-1550-10 -1×5 |                      |                | 1×5   | ≤7.6dB         | ≤0.3dB     |
| HPFS-1550-20 -1×2 | 1550nm               | 20W<br>(43dBm) | 1×2   | ≤3.2dB         | ≤0.1dB     |
| HPFS-1550-20 -1×3 |                      |                | 1×3   | ≤5.1dB         | ≤0.15dB    |
| HPFS-1550-20 -1×4 |                      |                | 1×4   | ≤6.4dB         | ≤0.2dB     |
| HPFS-1550-20 -1×5 |                      |                | 1×5   | ≤7.6dB         | ≤0.3dB     |
| HPFS-1550-50 -1×2 | 1550nm               | 50W<br>(47dBm) | 1×2   | ≤3.2dB         | ≤0.1dB     |
| HPFS-1550-50 -1×3 |                      |                | 1×3   | ≤5.1dB         | ≤0.15dB    |
| HPFS-1550-50 -1×4 |                      |                | 1×4   | ≤6.4dB         | ≤0.2dB     |
| HPFS-1550-50 -1×5 |                      |                | 1×5   | ≤7.6dB         | ≤0.3dB     |

## ORDER INFORMATION

HPFS - 1550 - 10 - 1×2

| Product type |                                    | Operating wavelength |        | Max. pass power |     | Ratio |     |
|--------------|------------------------------------|----------------------|--------|-----------------|-----|-------|-----|
| HPFS         | High power fiber optical splitter  | 1550                 | 1550nm | 10              | 10W | 1×2   | 1×2 |
| HPFC         | High power fiber optical connector | 1060                 | 1060nm | 20              | 20W | 1×3   | 1×3 |
|              |                                    |                      |        | 50              | 50W | 1×4   | 1×4 |
|              |                                    |                      |        |                 |     | 1×5   | 1×5 |