

# Pin diode switches

Labtech has designed and produced a wide range of reflective and absorptive broadband PIN and GaAs MMIC switches operating over the frequency range 200MHz to 26GHz. Whilst our standard range of switch components offer high isolation and low insertion loss and multi-way switching of up to six ports, Labtech's key differentiator is the ability to design custom parts to our customers bespoke requirements.

Hermetically sealed components are a standard option and for demanding applications Labtech can offer full environmental testing on all its parts in accordance with the appropriate test methods of MIL-STD-883. Production takes place in a class 10000 clean room and is controlled within our ISO9001:2000 quality system.

| Model series               | Number of throws | Frequency GHz dB max | Insertion loss dB min | Return loss | Isolation dB min ns max | Switching speed | Current consumption   |
|----------------------------|------------------|----------------------|-----------------------|-------------|-------------------------|-----------------|-----------------------|
| <b>Reflective switches</b> |                  |                      |                       |             |                         |                 |                       |
| LMS100                     | SPST             | 0.5 - 18             | 2.0                   | 12          | 60                      | 25              | +5V:50mA & -12V:5mA   |
| LMS200                     | SPDT             | 0.5 - 18             | 2.2                   | 11          | 60                      | 25              | +5V:70mA & -12V:40mA  |
| LMS300                     | SP3T             | 0.5 - 18             | 2.5                   | 11          | 60                      | 25              | +5V:100mA & -12V:40mA |
| LMS400                     | SP4T             | 0.5 - 18             | 2.7                   | 11          | 60                      | 25              | +5V:120mA & -12V:40mA |
| LMS500                     | SP5T             | 0.5 - 18             | 2.9                   | 11          | 60                      | 25              | +5V:140mA & -12V:40mA |
| LMS600                     | SPST             | 0.5 - 18             | 2.8                   | 11          | 60                      | 25              | +5V:160mA & -12V:40mA |
| LMS902                     | SPDT             | 1.0 - 1.1            | 0.8                   | 15          | 45                      | 1000            | +5V:300mA & -12V:50mA |
| <b>Absorptive switches</b> |                  |                      |                       |             |                         |                 |                       |
| LMN100                     | SPST             | 0.5 - 18             | 2.4                   | 11          | 60                      | 25              | +5V:50mA & -12V:5mA   |
| LMN200                     | SPDT             | 0.5 - 18             | 2.8                   | 11          | 60                      | 25              | +5V:70mA & -12V:40mA  |
| LMN300                     | SP3T             | 0.5 - 18             | 2.9                   | 11          | 60                      | 25              | +5V:100mA & -12V:40mA |
| LMN400                     | SP4T             | 0.5 - 18             | 3.1                   | 11          | 60                      | 25              | +5V:120mA & -12V:40mA |



design  
assembly  
manufacturing  
testing

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