

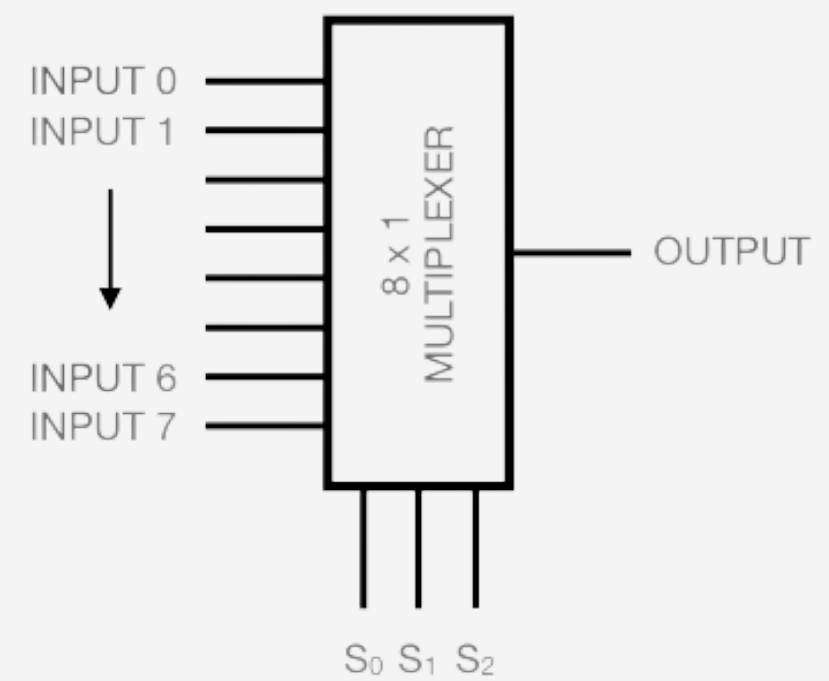
MULTIPLEXER CIRCUITS

NASCENT SEMICONDUCTOR JFET MULTIPLEXER CIRCUITS

High reliability, high temperature, radiation tolerant multiplexer circuits based on depletion mode silicon carbide n-channel junction FETs in hermetic sealed packaging. Optimised for signal level applications in extreme environments.

FEATURES

- Through resistance below 1kOhm
- Non-inverting output
- Low input capacitance
- Maximum operating temperature 400°C
- Maximum Total Ionising Dose in excess of 250 krad



RATINGS

| 25 °C Operation | Minimum | Typical | Maximum | Units |
|---|---------|---------|---------|---------------------|
| Input Voltage (f=1 kHz) | 0.01 | | 2.5 | V |
| Switching Frequency ($V_{IN} = 0.1$ V) | | 1500 | | Hz |
| Clamp Power Supply | 1.5 | | 5 | V |
| Control Signal | | | 10 | V |
| Output Impedance | | | 10 | kOhm |
| Input Capacitance | | | 10 | pF |
| Equivalent Noise | | | 0.01 | fA ² /Hz |

| 400 °C Operation | Minimum | Typical | Maximum | Units |
|---|---------|---------|---------|---------------------|
| Input Voltage (f=1 kHz) | 0.02 | | 2.25 | V |
| Switching Frequency ($V_{IN} = 0.1$ V) | | 1350 | | Hz |
| Clamp Power Supply | 1.5 | | 5 | V |
| Control Signal | | | 10 | V |
| Output Impedance | | | 18 | kOhm |
| Input Capacitance | | | 10 | pF |
| Equivalent Noise | | | 0.05 | fA ² /Hz |

PART NUMBER LJMUYX-0120
JFET MULTIPLEXER



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