

**Features**

- Fast switching speed<5nS
- 1 μ m GaAs IC process
- High isolation:60dB/100MHz
- Internal TTL driver
- Hermetic package DS-8
- Operating temperature range : -55°C ~+85°C

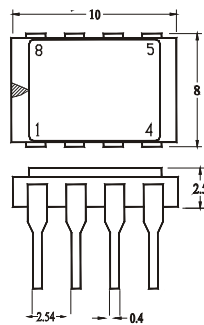
**Specifications**( measured in a 50 Ω system , TA=25°C)

Parameter	Symbol	Unit	Typical	Guaranteed	
				Min	Max
On/Off time	t <sub>on</sub>	ns	8	—	15
Rise timer	t <sub>r</sub>	ns	3	—	5
Fall time	t <sub>f</sub>	ns	3	—	5
On-resistance	R <sub>on</sub>	Ω	7	—	15
Isolation *	Iso	dB	65	60	—
Insertion loss	IL	dB	1.0	—	1.5

\* Taken at f=60MHz

**Absolute Maximum Ratings**

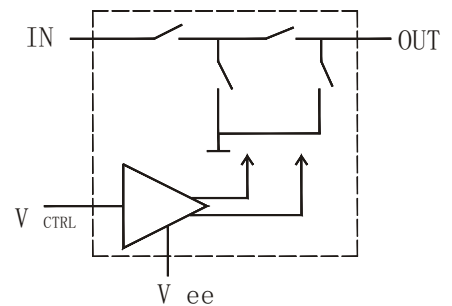
Negative Voltage: -6V<sub>DC</sub>  
Storage Temp:+125°C



DS-8

- 1: N/C
- 2: GND
- 3: Input
- 4: GND
- 5: N/C
- 6: Output
- 7: Control
- 8: -5V

**Functional Schematic**

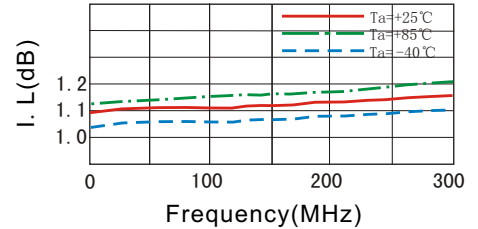


**Application notes**

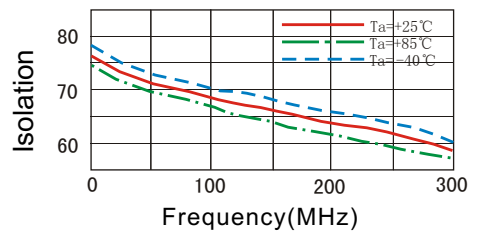
1. ESD sensitive device observe handling precaution
2. Precaution should be taken to avoid the video transients during switching period
3. The device should be properly grounded to insure the isolation performance

**Typical Performance**

Insertion Loss VS. Frequency



Isolation VS. Frequency



**Truth table**

Control Input	High	Low
XN521-I	OFF	ON
XN521-II	ON	OFF