

Features

- Internal TTL driver
- 1 μ m GaAs IC process
- Fast switching speed, 3ns typical
- High isolation:60dB/100MHz
- Stanard 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
Frequency range	f _L ~f _H	MHz	DC-300	DC	300
On/Off time	HE017	t _{on}	ns	8.0	20.0
	HE017A			20.0	40.0
Rise/Fall Time	HE017	t _r t _f	ns	5.0	15.0
	HE017A			10.0	15.0
Isolation	Iso	dB	65	60	-
Insertion loss	IL	dB	1.0	-	1.5
Overshoot	HE017	V _s	mV	20	50
	HE017A		mV	50	100
Control Current	I _{cc}	mA	5	-	10

* Taken at f=100MHz

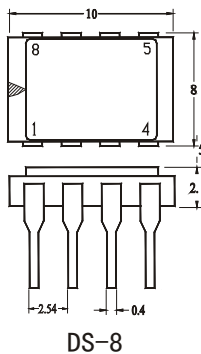
Absolute Maximum Ratings

Negative Voltage:

HE017: -14V

HE017A: -7V

Storage Temp:+125°C



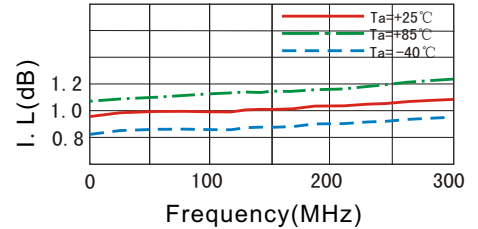
	HE017A	He017
1	N/C	-12V
2	Output1	Output1
3	GND	GND
4	Input	Input
5	GND	GND
6	Output2	Output2
7	-5V	N/C
8	Control	Control

Application notes

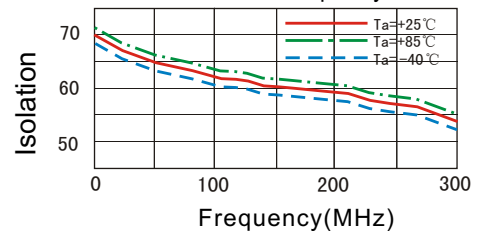
1. ESD sensitive device observe handling precoution
2. Precaution should be taken to avoid the video transients during switching period
3. The device should be properly grounded to insure the isolation performance

Typical Performance

Insertion Loss VS. Frequency



Isolation VS. Frequency



Truth table

HE017

Control Input	K1	K2
High	OFF	ON
Low	ON	OFF

HE017A

Control Input	K1	K2
High	ON	OFF
Low	OFF	ON

Functional Schematic

