

**Features**

- Frequency Range: 10~550MHz(typ)
- Gain: 18dB(typ)
- Low Noise: 1.3dB(Typ)
- IP3(out): 37dBm
- P-1: 23dBm
- Standard Hermetic Package SP
- Operating Temperature Range: -55°C~+85°C

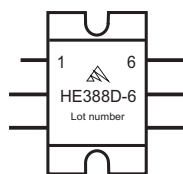
**Electrical** (50 Ω, V<sub>CC</sub>=+5V, T<sub>A</sub>=-55°C~+85°C)

Parameter	Symbol	Unit	Guaranteed	Typical
Frequency Range	f <sub>L</sub> ~f <sub>H</sub>	MHz	20~520	10~550
Gain	Gp	dB	≥17	18
Gain Flatness	ΔGp	dB	≤1.0	0.6
Noise Figure	Fn	dB	≤1.7 Δ	1.3
Input VSWR	VSWRi	--	≤2.0:1 Δ	1.5:1
Output VSWR	VSWRo	--	≤2.0:1 Δ	1.7:1
For 1dB Compression	P <sub>-1</sub>	dBm	≥23.0*Δ	24.0
Supply Current	I <sub>CC</sub>	mA	--	190

Note: “\*” f=300 MHz. “Δ” T<sub>A</sub>=24±1°C.

**Maximum Ratings**

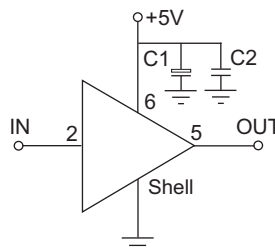
- Power supply: +7V<sub>DC</sub>
- RF input: +13dBm
- Storage Temp: +125°C



SP-1A

**Application Notes**

1. Interface schematic shown as right, C<sub>1</sub>=3.3~22 μ F, C<sub>2</sub>=3300~6800pF.
2. ESD observe handling precautions.
3. If power supply is higher than 8V, 25-27dBm amplifier available.
4. Connectorized package (SMA-3) available.
5. See assembly section for outline and mounting information.



**Typical Curves**

