Structure	Silicon Monolithic Integrated Circuit
Product name	3V operation Video driver (with LPF for mobile applications)
Model	B H 7 6 1 0 6 H F V
Outer dimensions	Fig 1 HVSOF6 (Plastic mold)
Application circuit	Fig 2

Function

- Built in 6dB AMP
- Built in LPF(8order) for Y input (f=4.5MHz)
- Sync Tip clamp circuit
- HVSOF6 plastic mold
- Built in standby function (Standby current is 0μA; TYP)
- Operating voltage 3V (Dynamic range 2.6Vpp)

■ Absolute maximum rating

Parameter	Symbol	Rating	Unit
Supply voltage	Vcc	7	V
Power Dissipation	Pd	＊４１０	mW
Operating temperature range	Topr	－４０～＋８５	℃
Storage temperature range	Tstg	－５５～＋１２５	℃

＊For operation above 25℃ free-air temperature , power dissipation is decreasing 4.1mW/℃ in case mounting the ROHM standard application board (70×70×1.6mm)

■ Operating voltage range

Parameter	Symbol	Min.	Std.	Max.	Unit
Operating voltage range	Vcc	2.6	3.0	5.5	V

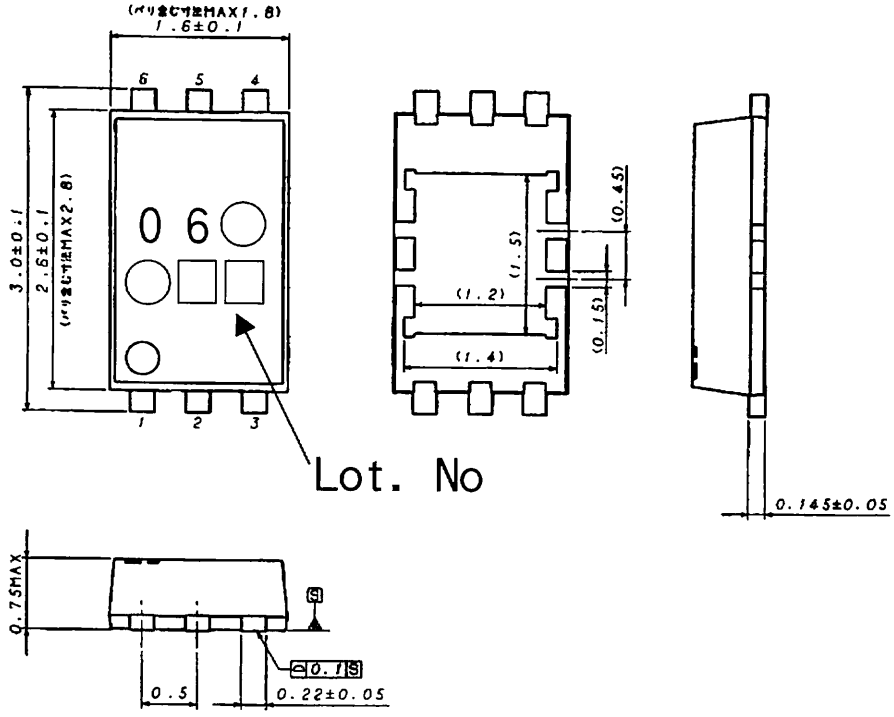
■Electrical characteristics 【Ta=25℃, VCC=3V unless otherwise specified】

Parameter		Symbol	Specifications			Unit	Testing condition
			Min.	Std.	Max.		
Circuit current	ACTIVE	I_{CC1}	—	7	11	mA	No Signal
	STANBY	I_{CC2}	—	0. 0	2	μA	Standby mode
Standby SW input current Voltage	HighLevel	I_{thH}	—	—	60	μA	6pin=3.0V
	Low Level	I_{thL}	—	—	4	μA	6pin=0.2V
Standby SW Change Voltage	HighLevel	V_{thH}	1.2	—	V_{cc}	V	Standby OFF
	Low Level	V_{thL}	0	—	0.45	V	Standby ON
Voltage gain		GV	+5.5	+6.0	+6.5	dB	Vin=100KHz, 1.0Vpp
Maximum output level		Vomv	2.2	2.6	—	Vpp	f=10KHz、THD=1%
Frequency characteristics	1	G_{f1}	-1.0	0.1	0.5	dB	f=4.5MHz/100KHz,1.0Vp-p
	2	G_{f2}	-7.0	-4.0	0.3	dB	f=8.2MHz/100KHz,1.0Vp-p
	3	G_{f3}	—	-45.0	—	dB	f=19MHz/100KHz,1.0Vp-p
Y signal output S／N		SN_Y	—	-67.0	—	dB	Band 100KHz~6MHz Terminal impedance 75Ω, 100% White video signal
C signal output S／N	AM	SN_{CA}	—	-77.0	—	dB	Band 100Hz~500KHz Terminal impedance 75Ω, 100% chroma video signal
	PM	SN_{CP}	—	-65.0	—	dB	
Different Gain		D_G	—	0.7	3.0	%	Vin= 1.0Vp-p Standard stair step signal
Different Phase		D_P	—	0.7	3.0	deg	

■Control Terminal

PARAMETER	STATUS	NOTE
STANDBY (6PIN)	H	STANDBY : OFF
	L	STANDBY : ON
	OPEN	STANDBY : ON

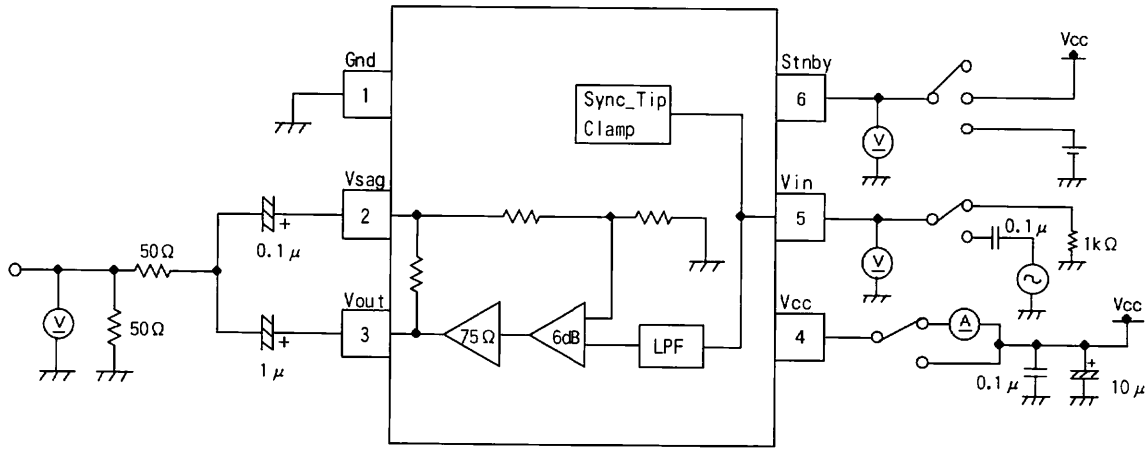
■Physical dimensions



(UNIT : mm)

Fig.1 H V S O F 6 (Plastic mold)

■Measurement circuit



■ Application circuit

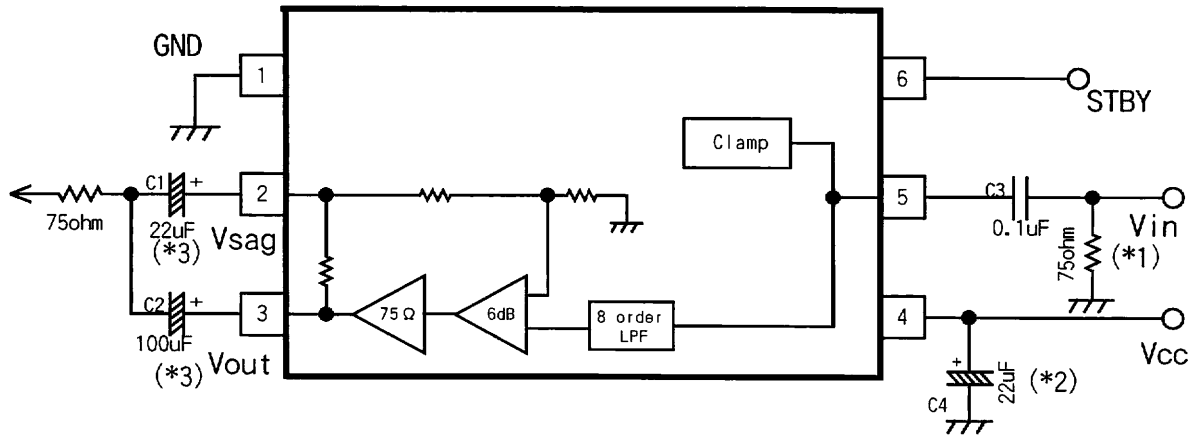


Fig.2

■Notification on use

*1; The termination impedance of the input terminal (pin♯5) should be less than 700ohm.

*2; Connect bypass capacitor as close to Vcc pin (pin♯4).

*3; The recommended value of output coupling capacitor is indicated in Fig2.
If the value of output coupling capacitor is reduced, you should check sag effect by white-black bounds signal or Hbar signal.
(white-black bounds signal, Hbar signal ;The signal that easily worsens sag effect)
Please test the following combination as reference.
(Note: When lowering C2 capacitor value, sag deteriorates.)

C1	33μF	33μF	33μF
C2	68μF	47μF	33μF

*4; Pay particular attention on pin assignment to prevent irreversible damage to the IC.

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