

S T K 6 7 2 2 H

Thick Film Hybrid IC

SANYO**Function**

Stepping motor driver

Applications

Printers, facsimile system, floppy disks

Feature

Constant-current chopper drive (Separate excitation, with input inverters built in)

Maximum Ratings at Ta=25°C

			unit
Supply Voltage	V_{CCmax}	Operating voltage at quiescent mode	50 V
Phase Current	I_{OHmax}	0.5sec, 1 pulse	2.1 A
Storage Temperature	Tstg		-40to+125 °C
Junction Temperature	Tjmax		150 °C
Operating Case Temperature	Tcmax		105 °C

Allowable Operating Conditions at Ta=25°C

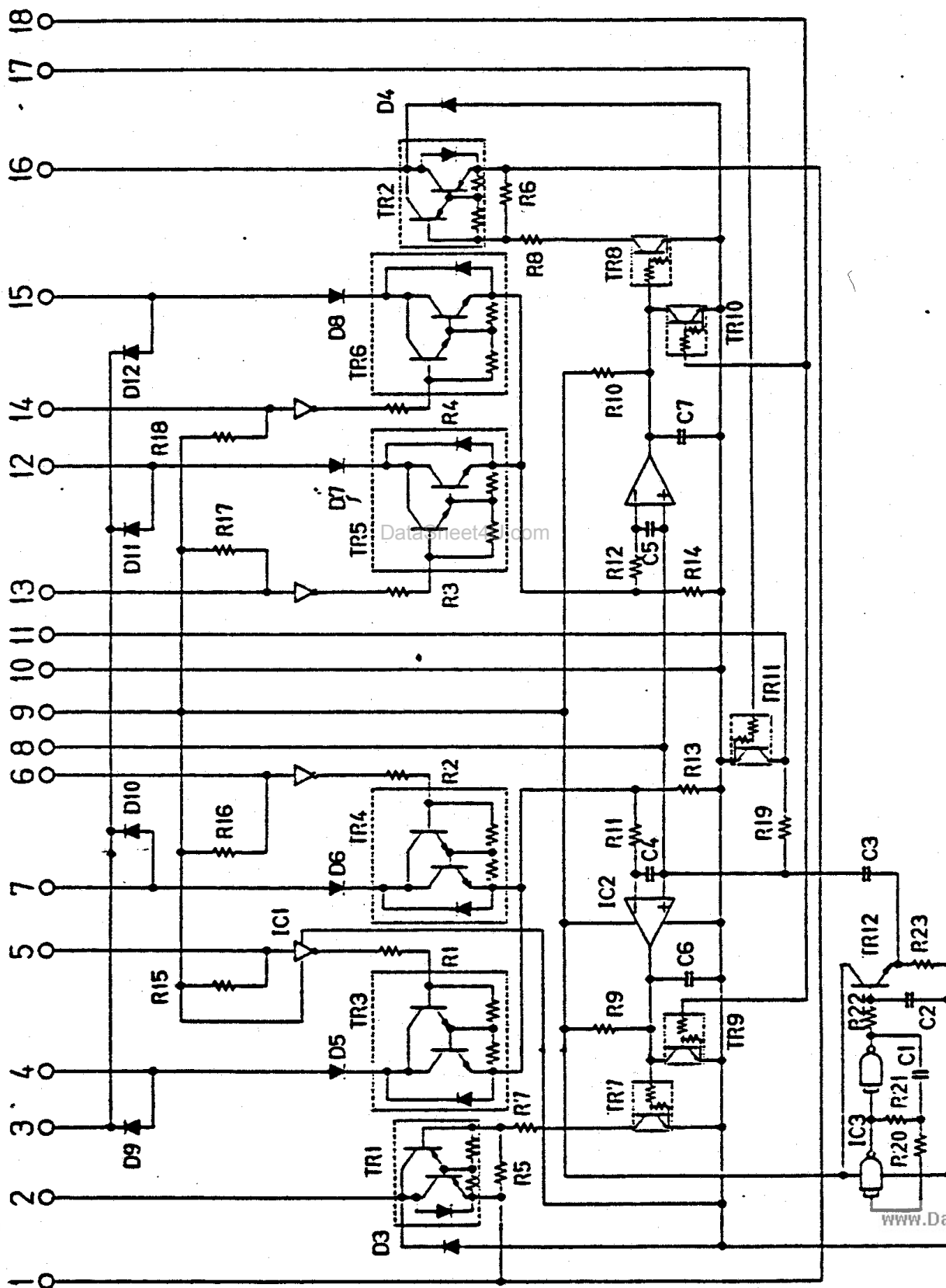
			unit
Supply Voltage	V_{CCmax}		22to45 V
Phase Current	I_{OHmax}	Duty 50%	1.5 A

Electrical Characteristics at Ta=25°C, $V_{CC1}=36V$, $V_{CC2}=5V$

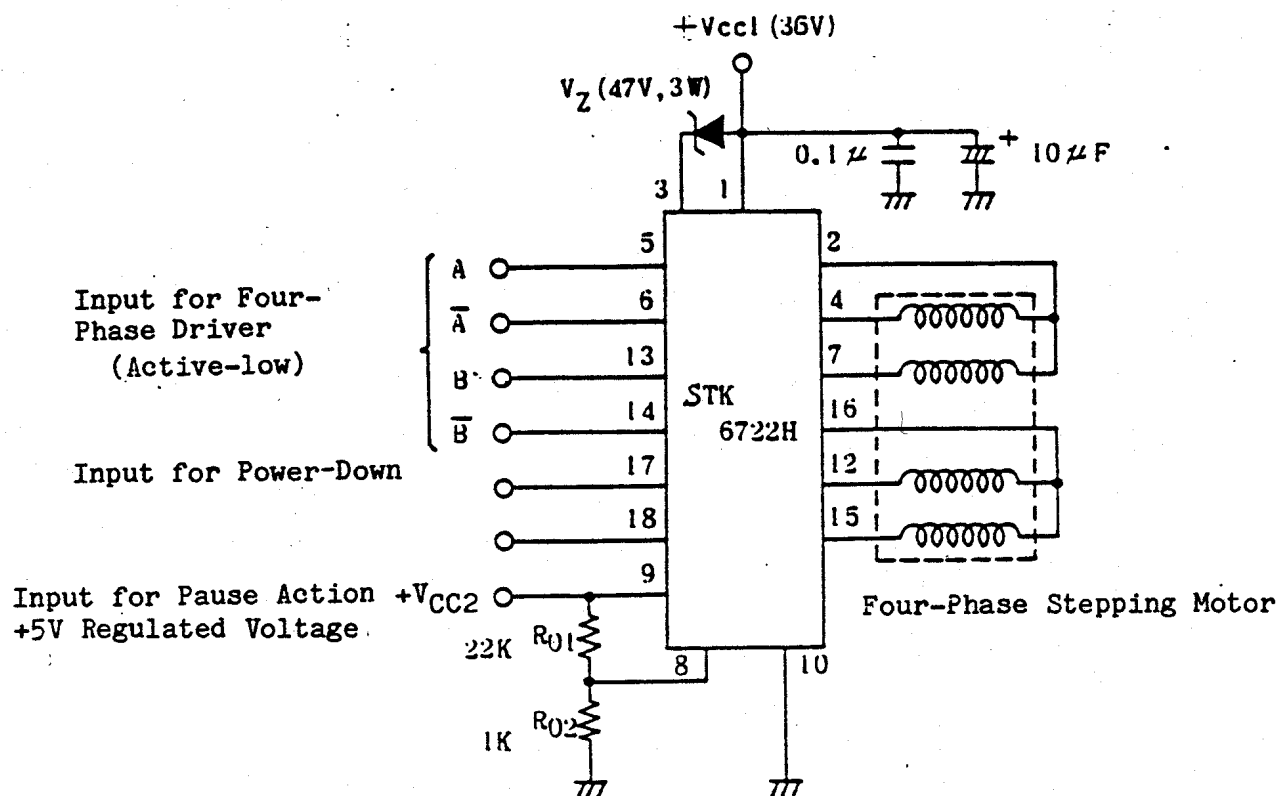
			min	typ	max	unit
Output Saturation Voltage1	Vst-1	RL=12ohms, Vin=GND, 1-2, 1-16		1.2	1.6	V
Output Saturation Voltage2	Vst-2	RL=21ohms, $V_{in}=GND$, 4, 7, 12, 15-10		2.5	3.0	V
Output Current (Average)1	Io-1	Load: R=3.5ohms, L=3.8mH, Vin=GND, per phase	0.98	1.05	1.12	A
Output Current (Average)2 at Power-Down Mode	Io-2	Load: L=3.8mH, R=3.5ohms, per phase, Vin=GND, power-down input voltage V_{pd} 2.0V $\leq$ $V_{pd} \leq$ 5.0V (pin 17)	0.45	0.52	0.60	A
Current at Pause Mode	Icco	2.0V $\leq$ Vs $\leq$ 5.0V, Vin=GND, Vs: pin 18 input pause voltage	10	15	20	mA
OSC Frequency	fc	With $R_{pd}=680ohms$	20	24	28	kHz
Diode Forward Voltage1	Vdf-1	If=0.3A		1.5	1.8	V
Diode Forward Voltage2	Vdf-2	If=0.5A		1.2	1.8	V

Note1. For power supply, use a voltage regulator.

Equivalent Circuit



Application Circuit



Cautions

1. It is inhibited to bring the input signals to "L" level simultaneously.
2. The external zener diode must be selected according to the operating conditions.

$$V_Z < 100 - V_{CC1\max}$$

Case Outline

