

# Unipolar Driver ICs

# SLA7020M SLA7021M WITH MOSFETs

## ■ Ratings

Type No.	Absolute maximum ratings	Motor supply Voltage	FET output breakdown voltage	Control voltage	TTL input voltage	Reference voltage	Output current	Power dissipation	Channel temperature	Storage temperature
	(V)	(V)	(V)	(V)	(V)	(V)	(A)	(W)	(°C)	(°C)
	V <sub>CC</sub>	V <sub>DS</sub>	V <sub>S</sub>	V <sub>IN</sub>	V <sub>REF</sub>	I <sub>O</sub>	P <sub>D</sub>	T <sub>ch</sub>	T <sub>stg</sub>	
SLA7020M	46	100	32	7	2	1.5	4.5 (No Fin)	150	-40 to +150	
SLA7021M						3				

## ■ Characteristics (1) DC Characteristics

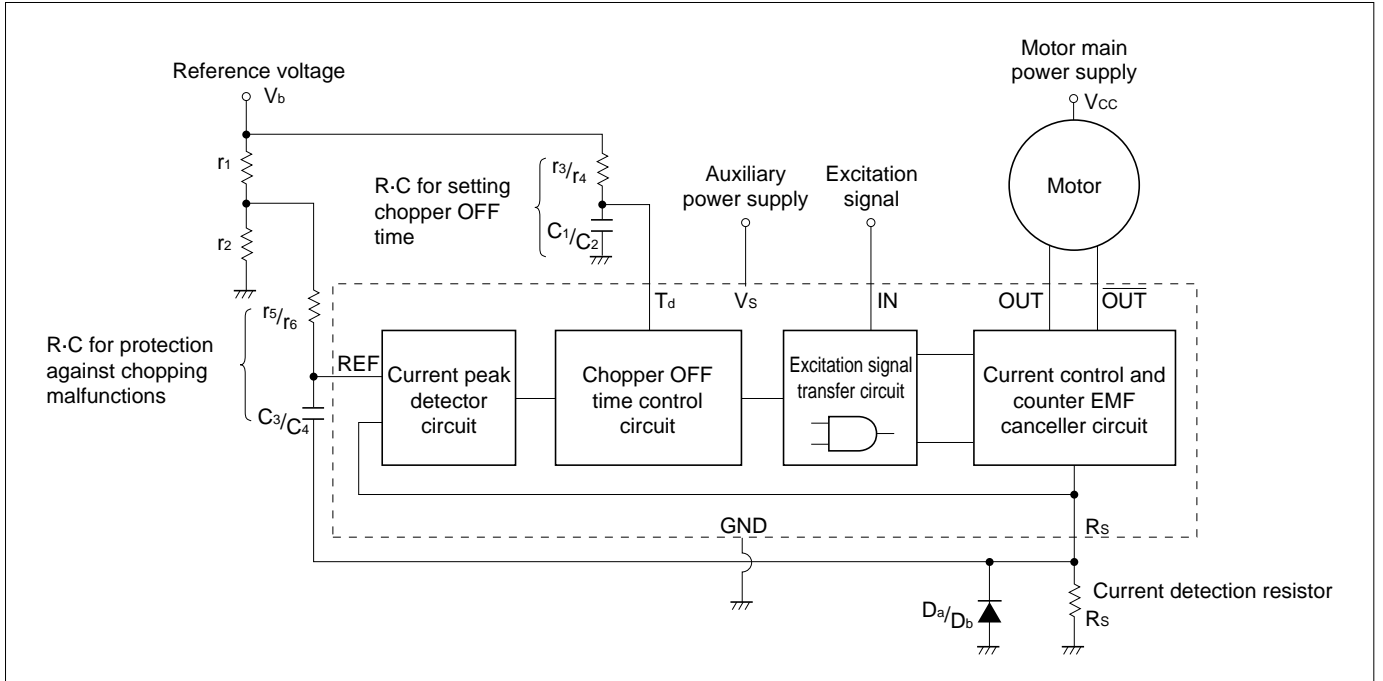
Type No.	Control current (mA)			Control voltage (V)			FET turn-on voltage (V)			FET drain leak current (mA)			TTL input current (μA)			TTL input current (mA)			TTL input voltage (OUT) (V)			TTL input voltage (V)			TTL input voltage (OUT) (V)			TTL input voltage (V)					
	I <sub>S</sub>			V <sub>S</sub>			V <sub>DS</sub>			I <sub>DSS</sub>			I <sub>IH</sub>			I <sub>IL</sub>			V <sub>IH</sub>			V <sub>IL</sub>			V <sub>IH</sub>			V <sub>IL</sub>					
	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max
SLA7020M	5.5	10	15	10	19	30			0.6			4			40			-0.8	2.0					0.8	2.0								0.8
SLA7021M									0.85																								

## (2) AC Characteristics

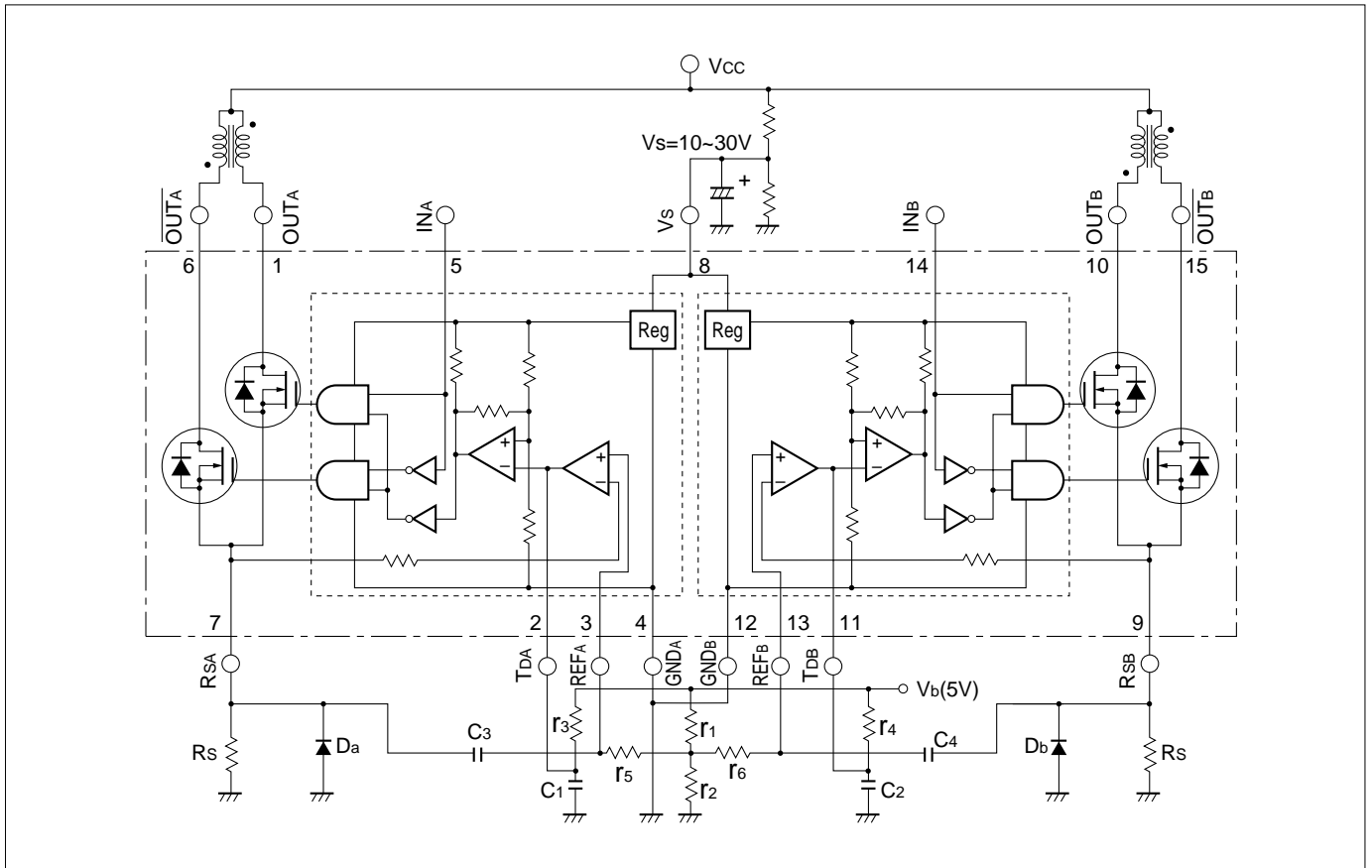
Type No.	FET diode forward voltage (V)			Switching time (μs)																							
	V <sub>SD</sub>			T <sub>r</sub>			T <sub>stg</sub>			T <sub>f</sub>																	
	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max			
SLA7020M			1.1																								
SLA7021M			2.3		0.5						0.7																

# SLA7020M and SLA7021M

## Block diagram

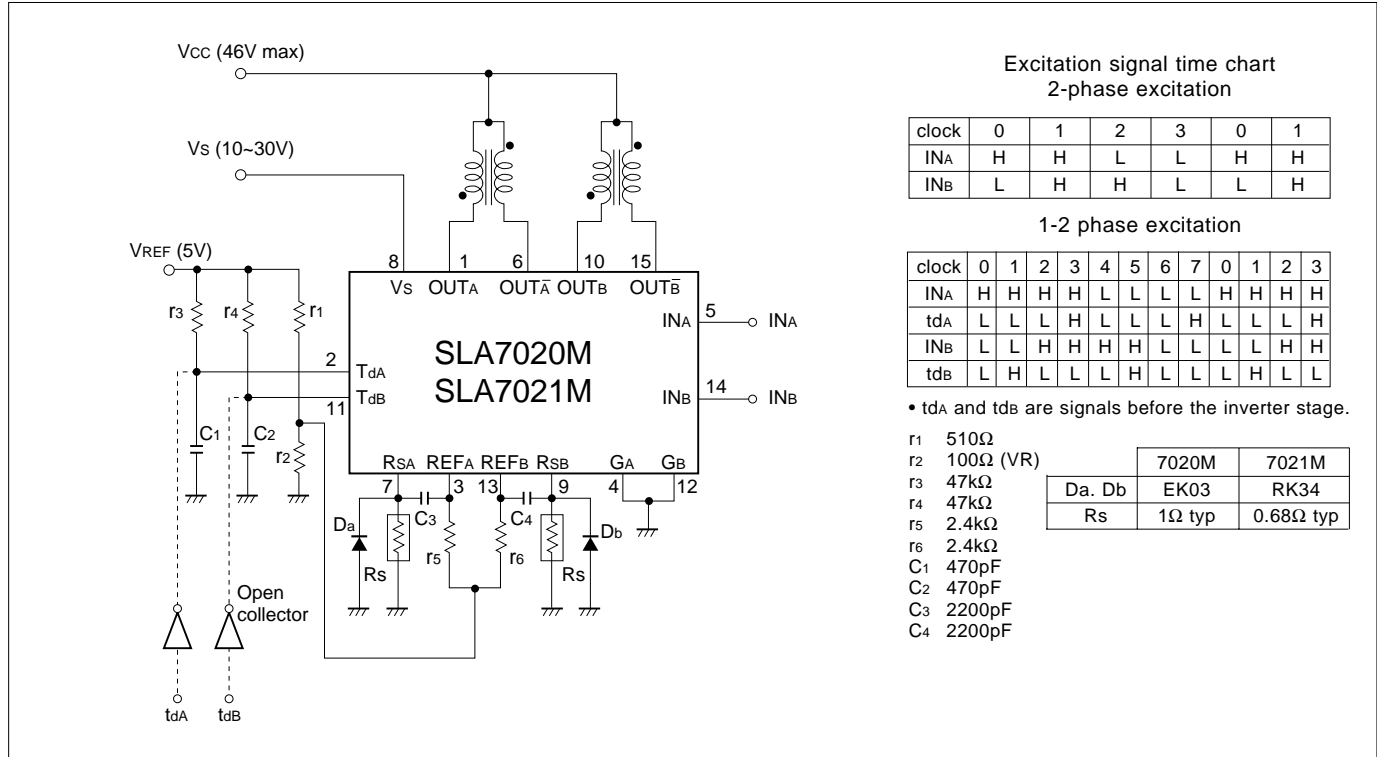


## Internal circuit diagram (enclosed with chain line)



# SLA7020M and SLA7021M

## ■ Diagram of standard external circuit (Recommended circuit constants)



## ■ External dimensions

(Unit: mm)

