

Unipolar Driver ICs

SLA7024M

SLA7026M

WITH MOSFETs

SLA7027MU

■ Ratings

Type No.	Absolute maximum ratings	Motor supply voltage (V)	FET output breakdown voltage (V)	Control voltage (V)	TTL input voltage (V)	Reference voltage (V)	Output current (A)	Power dissipation (W)	Channel temperature (°C)	Storage temperature (°C)
		V _{CC}	V _{DS}	V _S	V _{IN}	V _{REF}	I _O	P _D	T _{ch}	T _{stg}
SLA7024M		46	100	46	7	2	1.5	4.5 (No Fin)	150	-40 to +150
SLA7026M							3			
SLA7027MU							1			

■ Characteristics (1) DC Characteristics

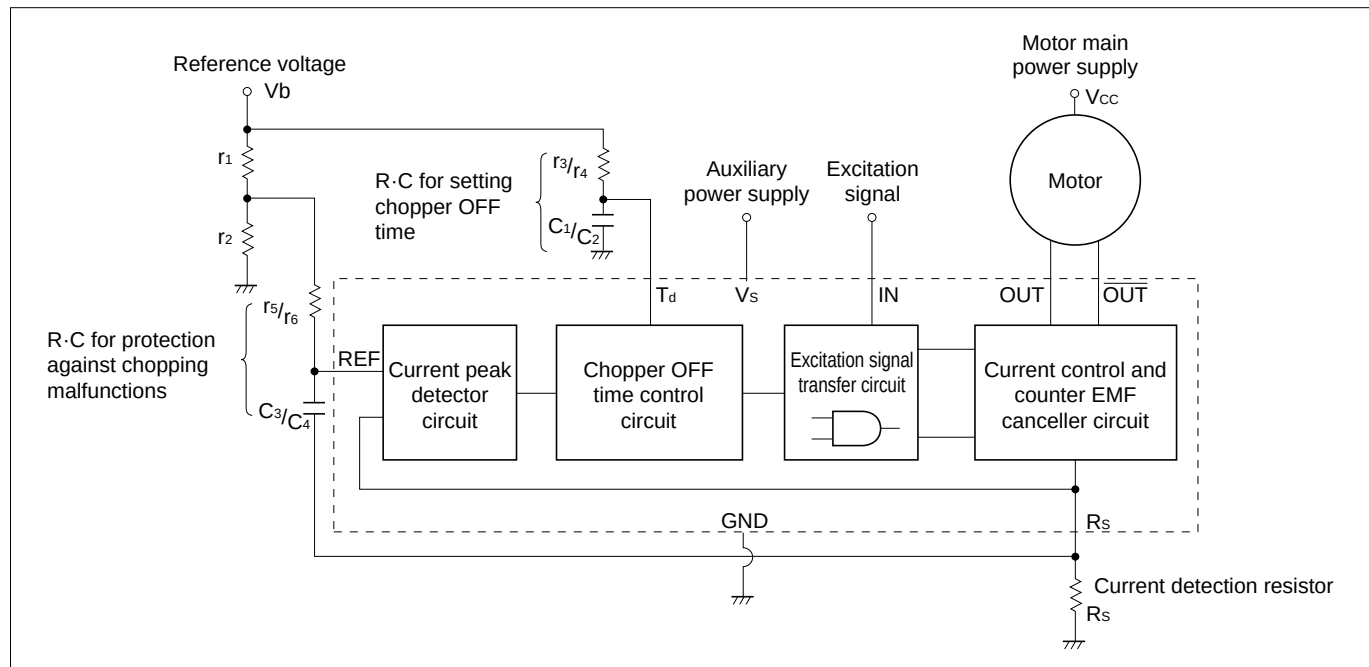
Type No.	Electrical characteristics		Control current (mA)		Control voltage (V)		FET turn-on voltage (V)			FET drain leak current (mA)			TTL input current (μA)			TTL input current (mA)			TTL input voltage (Active high) (V)						TTL input voltage (Active low) (V)						
			V _S = 44V				(7024M)I _{DS} = 1A, V _S = 14V (7026M)I _{DS} = 3A, V _S = 14V (7027MU)I _{DS} = 1A, V _S = 14V)			V _{DSS} = 100V V _S = 44V			V _{IH} = 2.4V V _S = 44V			V _{IL} = 0.4V V _S = 44V			(7024M)I _{DS} =1A (7026M)I _{DS} =3A (7027MU)I _{DS} =1A V _{DSS} = 100V V _{DSS} = 100V (7024M)I _{DS} =1A (7026M)I _{DS} =3A (7027MU)I _{DS} =1A												
			I _S		V _S		V _{DS}			I _{DSS}			I _{IH}			I _{IL}			V _{IH}			V _{IL}			V _{IH}			V _{IL}			
			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
SLA7024M									0.6																						
SLA7026M		10	15	10	24	44			0.85			4			40			-0.8	2.0			0.8	2.0							0.8	
SLA7027MU									0.85																						

(2) AC Characteristics

Type No.	Electrical characteristics			FET diode forward voltage (V)			Switching time (μs)											
				(7024M)I _{SD} = 1A (7026M)I _{SD} = 3A (7027MU)I _{SD} = 1A			V _S = 24V (7024M, 7026M)I _D = 1A (7027MU)I _D = 0.8A											
				V _{SD}			T _r			T _{stg}			T _f					
	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max			
SLA7024M																		
SLA7026M																		
SLA7027MU																		

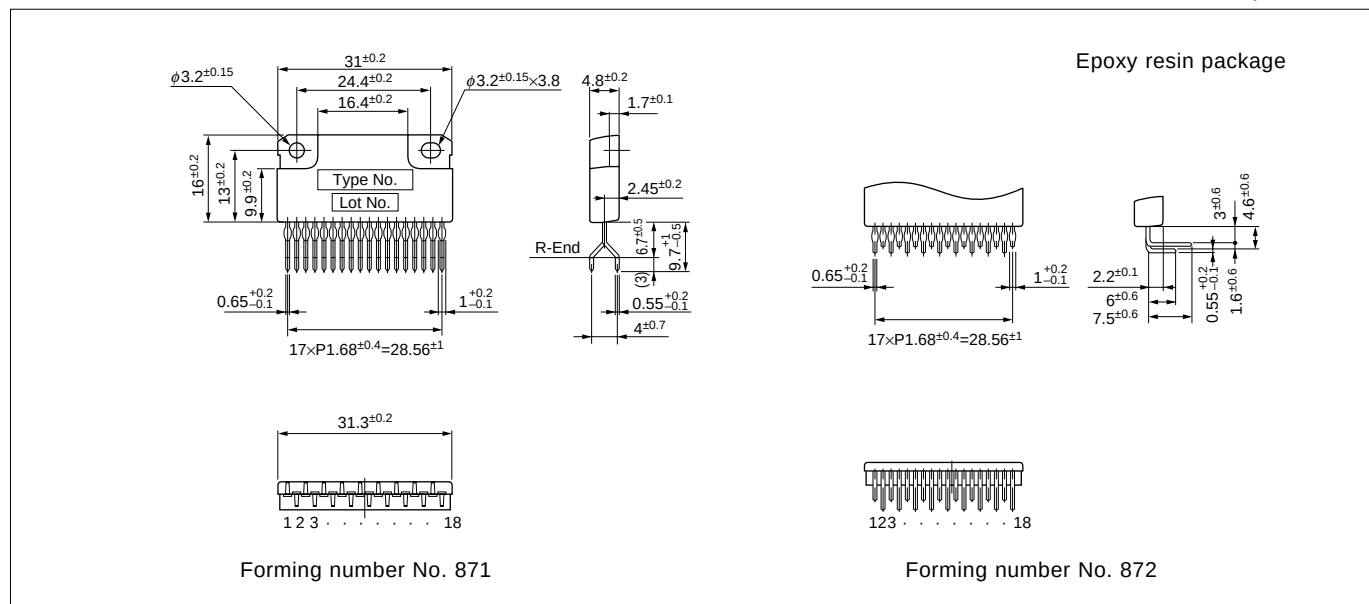
SLA7024M, SLA7026M and SLA7027MU

■ Block diagram



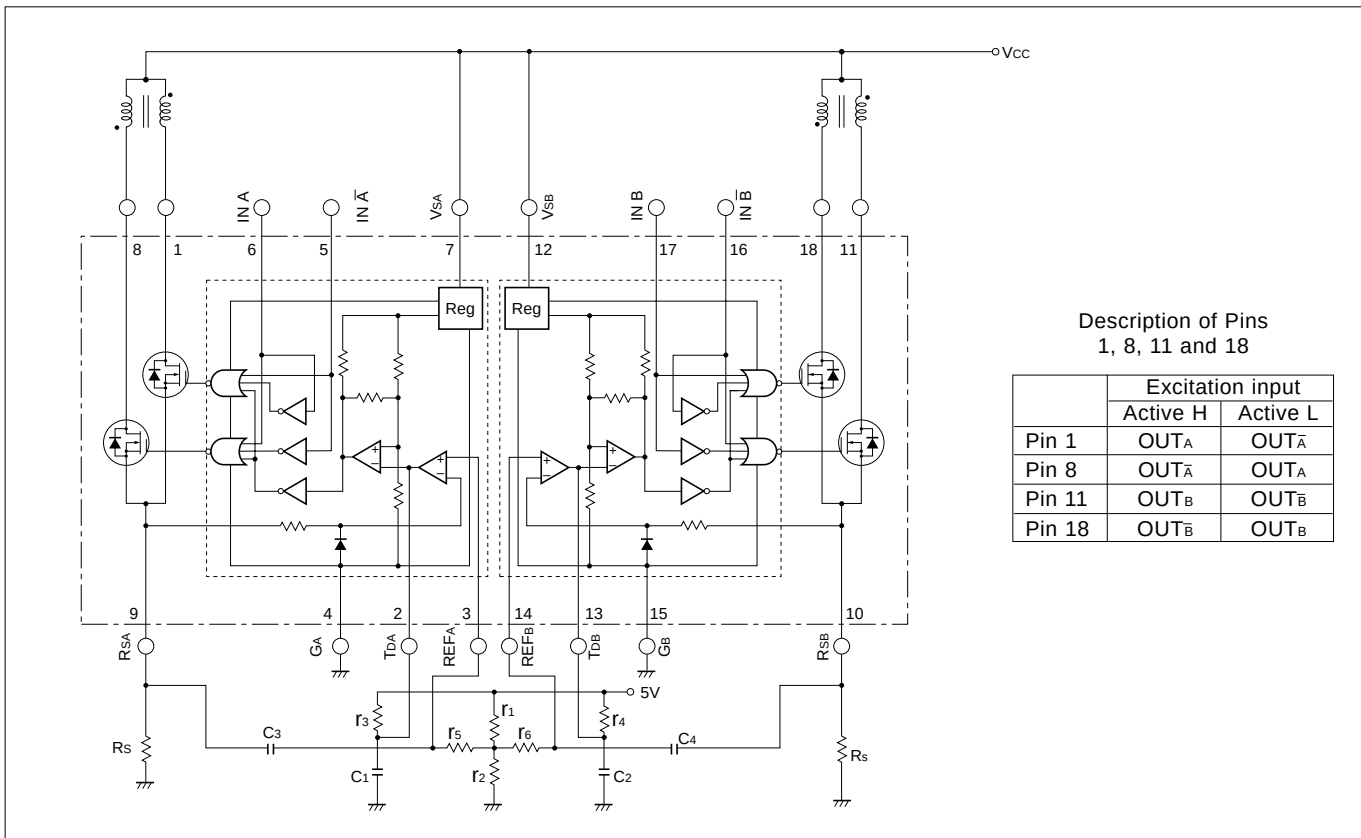
■ External dimensions

(Unit: mm)



SLA7024M, SLA7026M and SLA7027MU

■ Internal circuit diagram (enclosed with chain line)



SLA7024M, SLA7026M and SLA7027MU

■ Diagram of standard external circuit (Recommended circuit constants)

