

Unipolar Driver ICs

SDK03M WITH MOSFETs

■ Ratings

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)	(A)	(W)	(°C)	(°C)
Type No.	V _{CC}	V _{DS}	V _S	V _{IN}	V _{REF}	I _O	P _D	T _{ch}	T _{stg}
SDK03M	46	100	46	7	2	1	2.5 (No Fin)	150	-40 to +150

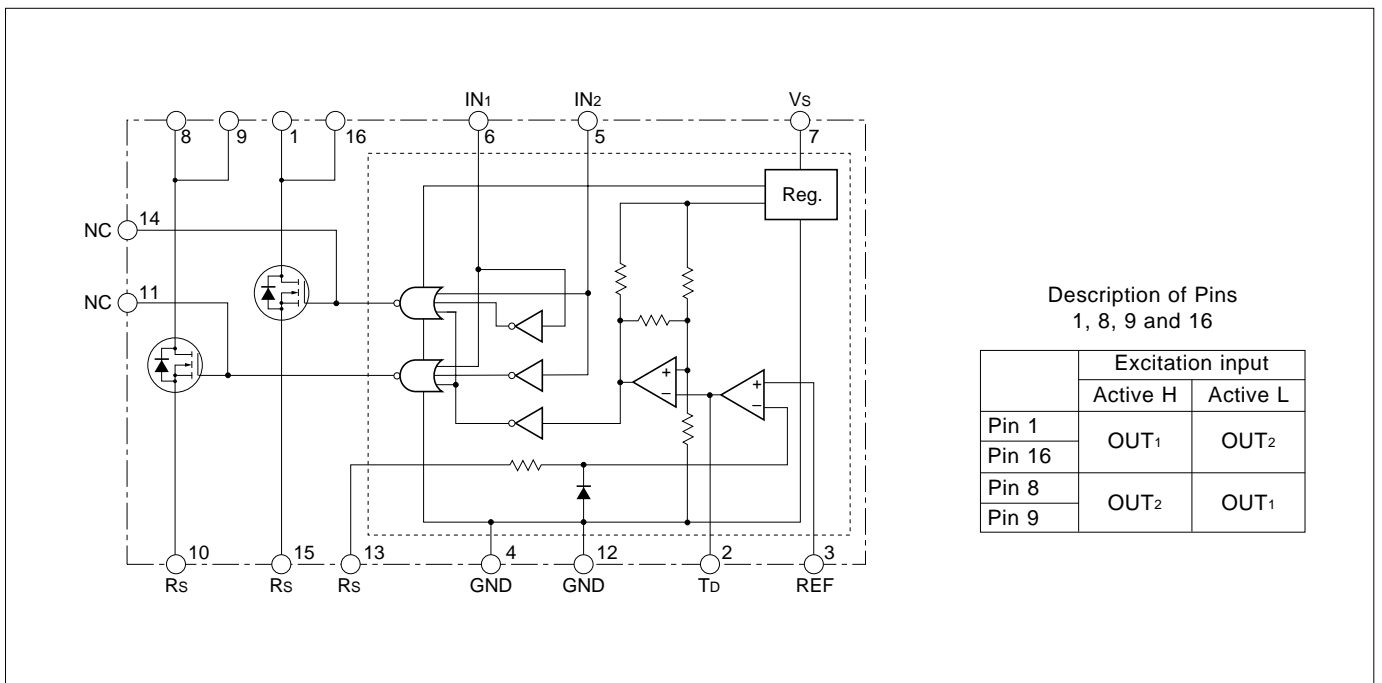
■ Characteristics (1) DC Characteristics

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						I _D = 1A, V _S = 14V			V _{DSS} = 100V V _S = 44V			V _{IH} = 2.4V V _S = 44V			V _{IL} = 0.4V V _S = 44V			I _D = 1A V _{DSS} = 100V			V _{DSS} = 100V								
	I _S			V _S			V _{DS}			I _{DSS}			I _{IH}			I _{IL}			V _{IH}			V _{IL}								
Type No.	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
SDK03M		5	7.5	10	24	44			0.85			4			40			-0.8	2.0			0.8	2.0						0.8	

(2) AC Characteristics

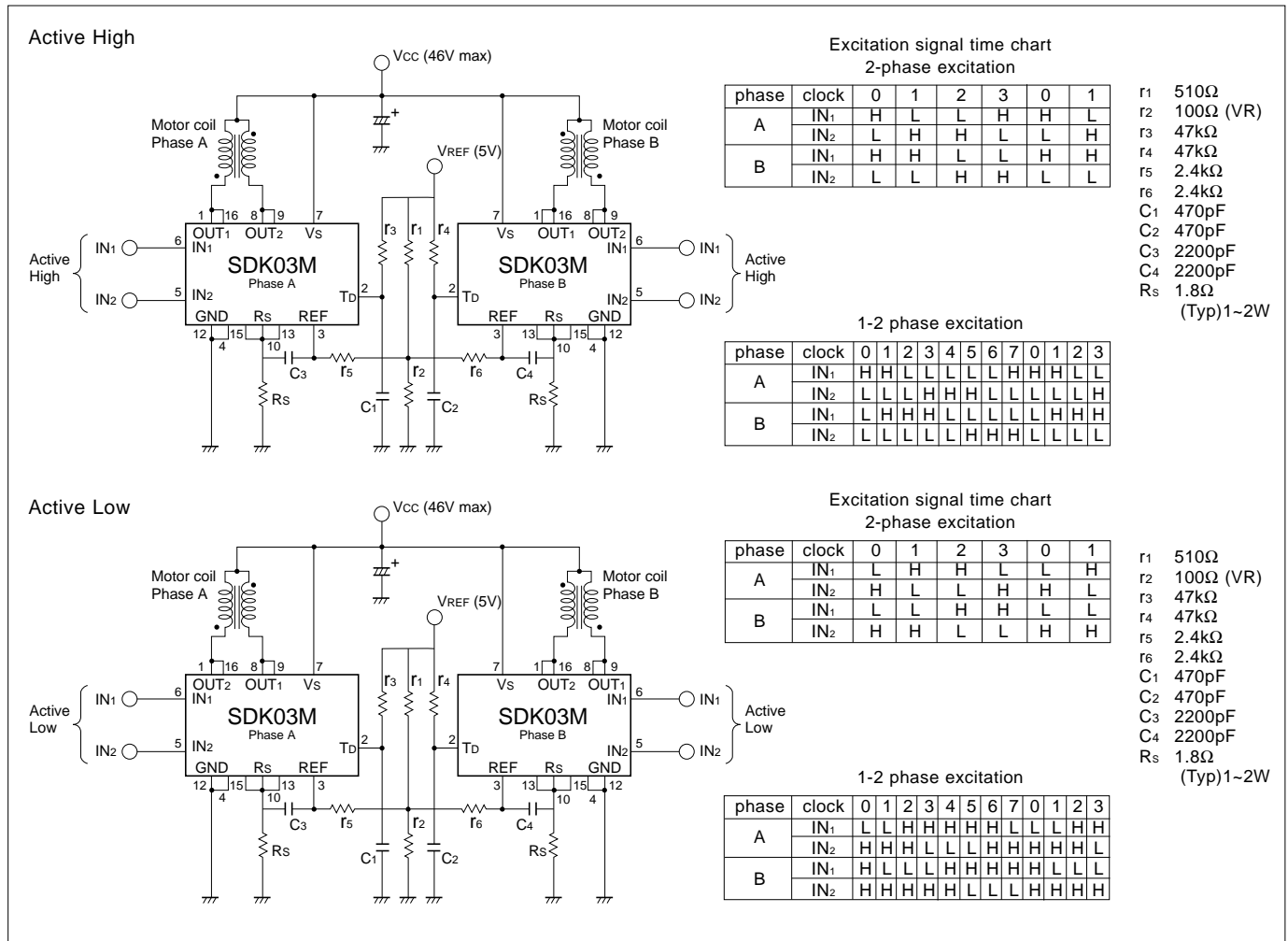
Electrical characteristics	FET diode forward voltage (V)			Switching time (μs)											
	I _{SD} = 1A			V _S = 24V I _D = 0.8A											
	V _{SD}			T _r			T _{stg}			T _f					
Type No.	min	typ	max	min	typ	max	min	typ	max	min	typ	max	min	typ	max
SKD03M			1.2			0.5			0.7						0.1

■ Internal circuit diagram



SDK03M

Diagram of standard external circuit (Recommended circuit constants)



External dimensions

(Unit: mm)

