



**SU FUTURO EN TECNOLOGIA**

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Carlos Erazo  
Gerente General

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■ ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Rating	Unit
Voltage on Any Pin Relative to $V_{SS}$	$V_T$	-0.5*1 to +7.0	V
Operating Temperature	$T_{op}$	0 to +70	°C
Storage Temperature	$T_{stg}$	-55 to +125	°C
Storage Temperature Under Bias	$T_{mb}$	-10 to +85	°C
Power Dissipation	$P_T$	1.0	W

Note) \*1. -3.5V for pulse width  $\leq 50$ ns

■ TRUTH TABLE

$\overline{CS}$	$\overline{OE}$	WE	Mode	$V_{CC}$ Current	I/O Pin	Ref. Cycle
H	x	x	Not Selected	$I_{SB}, I_{SB1}$	High Z	
L	L	H	Read	$I_{CC}$	Dout	Read Cycle (1)~(3)
L	H	L	Write	$I_{CC}$	Din	Write Cycle (1)
L	L	L	Write	$I_{CC}$	Din	Write Cycle (2)

■ RECOMMENDED DC OPERATING CONDITIONS ( $T_a=0$  to +70°C)

Item	Symbol	min	typ	max	Unit
Supply Voltage	$V_{CC}$	4.5	5.0	5.5	V
	$V_{SS}$	0	0	0	V
Input Voltage	$V_{IH}$	2.2	3.5	6.0	V
	$V_{IL}$	-0.3*1	-	0.8	V

Note) \*1. -3.0V for pulse width  $\leq 50$ ns.

■ DC AND OPERATING CHARACTERISTICS ( $V_{CC}=5V \pm 10\%$ ,  $V_{SS}=0V$ ,  $T_a=0$  to +70°C)

Item	Symbol	Test Conditions	HM6116-2			HM6116-3/4			Unit
			min	typ*1	max	min	typ*1	max	
Input Leakage Current	$ I_{LI} $	$V_{CC}=5.5V, V_{IN}=V_{SS}$ to $V_{CC}$	-	-	10	-	-	10	$\mu A$
			-	-	2*3	-	-	2*3	
Output Leakage Current	$ I_{LO} $	$\overline{CS}=V_{IH}$ or $\overline{OE}=V_{IN}$ , $V_{I/O}=V_{SS}$ to $V_{CC}$	-	-	10	-	-	10	$\mu A$
			-	-	2*3	-	-	2*3	
Operating Power Supply Current	$I_{CC}$	$\overline{CS}=V_{IL}, I_{I/O}=0mA$	-	40	80	-	35	70	mA
			-	35*3	70*3	-	30*3	60*3	
Average Operating Current	$I_{CC1}^{*2}$	$V_{IH}=3.5V, V_{IL}=0.6V,$ $I_{I/O}=0mA$	-	35	-	-	30	-	mA
			-	30*3	-	-	25*3	-	
Average Operating Current	$I_{CC2}$	Min. cycle, duty=100% $I_{I/O}=0mA$	-	40	80	-	35	70	mA
			-	35*3	70*3	-	30*3	60*3	
Standby Power Supply Current	$I_{SB}$	$\overline{CS}=V_{IH}$	-	5	15	-	5	15	mA
			-	4*3	12*3	-	4*3	12*3	
Standby Power Supply Current	$I_{SB1}$	$\overline{CS} \geq V_{CC} - 0.2V, 0V \leq V_{IN} \leq 0.2V$ or $V_{CC} - 0.2V \leq V_{IN}$	-	0.02	2	-	0.02	2	$\mu A$
			-	2*3	50*3	-	2*3	50*3	
Output Voltage	$V_{OL}$	$I_{OL}=4mA$	-	-	0.4	-	-	-	V
		$I_{OL}=2.1mA$	-	-	-	-	-	0.4	V
	$V_{OH}$	$I_{OH}=-1.0mA$	2.4	-	-	2.4	-	-	V

Notes) \*1.  $V_{CC}=5V, T_a=25^\circ C$

\*2. Reference Only

\*3. This characteristics are guaranteed only for L-version.

