

Absolute Maximum Ratings

Case Temperature Under Bias	-25°C to +100°C
Case Storage Temperature	-40°C to +125°C
DC Supply Voltage (V _{CC})	0 to 7.0V
Voltage to any pin with respect to ground	-0.5V to V _{CC} +0.5V

Operating Conditions

Symbol	Parameter	Min.	Max.	Unit
V _{CC}	Supply Voltage (5 volt)	4.75	5.25	V
V _{CC}	Supply Voltage (3.3 volt) ³	3.15	3.45	V
Freq	Operating Frequency	-	30	MHz
T _a	Ambient Temperature	0	70	C

Capacitance DC Specifications

Symbol	Parameter	Min.	Max.	Unit	Note
C _{in}	Input Capacitance	-	10	pF	1
C _{out}	Output Capacitance	-	10	pF	1

ICC Specifications

Symbol	Parameter	Min.	Max.	Unit	Note
I _{CC}	Supply Current	-	30	mA	2
I _{CC1}	Supply Current/ SLEEP Mode	-	1	mA	2
I _{CC2}	Supply Current/ SUSPEND Mode	-	100	μA	2

- Notes: 1. @ 1MHz
 2. Typical conditions
 3. VG-660-L version only

VADEM VG-660

VGA LCD/CRT CONTROLLER

DC Characteristics

Parameter	Min.	Max.	Unit	Conditions
V_{IH}	$.7V_{CC}$	$V_{CC}+0.5$	V	-
V_{IL}	-0.5	$.15V_{CC}$	V	-
$V_{IH_{CLK}}$	$.8V_{CC}$		V	-
$V_{IL_{CLK}}$	-	$.1V_{CC}$	V	-
V_{OL}	-	0.1 0.4	V V	$I_{OL} = 20\mu A$ I_{OL} = defined by the selected output type.
V_{OH}	$V_{CC}-0.1$ 2.4V	-	V V	$I_{OH} = -20\mu A$ I_{OH} = defined by the selected output type.
I_{IL}	-	-10	μA	$V_{IL} = V_{CC}$
I_{IH}	-	10	μA	$V_{IH} = V_{SS}$
$I_{IL_{CLK}}$	-	-1.0	μA	$V_{IL} = 0.2V$
$I_{IH_{CLK}}$	-	1.0	μA	$V_{IH} = 0.95V_{CC}$