

VIDEO SWITCH

ADVANCE DATA

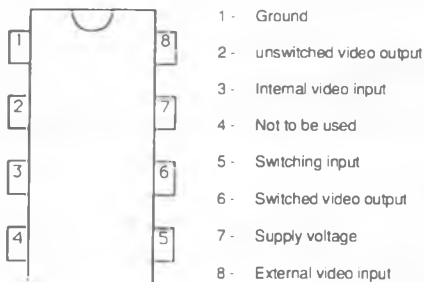
- 2 VIDEO OUTPUTS WHICH CAN DRIVE 150Ω LOAD
- DYNAMIC OUTPUT AMPLITUDE 2 VPP ON EACH OUTPUT
- BANDWIDTH 20MHz
- FULLY PROTECTION AGAINST ESD



DESCRIPTION

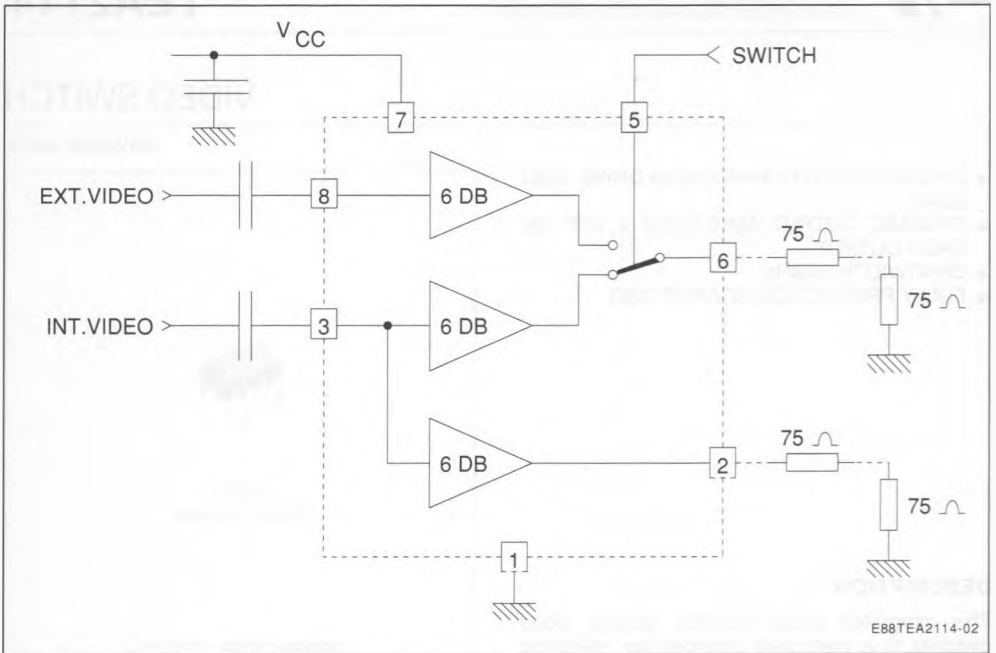
This integrated circuit provides general video switches. It is particularly intended for switching between the peri TV plug and video section of the sets. Its electrical performances make it suitable for wide bandwidth applications (teletext, D2MAC).

PIN CONNECTIONS



E68TEA2114-01

BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CC}	Supply Voltage	15	V
T_J	Junction Temperature	- 40 to + 150	°C
T_{stg}	Storage Temperature	- 40 to + 150	°C

ELECTRICAL CHARACTERISTICS

$T_{AMB} = 25^{\circ}\text{C}$; $V_{CC} = 8\text{V}$ (unless otherwise specified)

Symbol	Parameter	Min.	Typ.	Max.	Unit
V_{CC}	Supply Voltage Range	6.5		14.5	V
I_{CC}	Supply Current (no load pin 2 and pin 6)		8	15	mA
I_{CC}	Supply Current (with load 150Ω on pin 2 and pin 6, no video on inputs)		25	35	mA

INPUTS (pin 3 and pin 8)

Symbol	Parameter	Min.	Typ.	Max.	Unit
	Video Input Swing	1.5	1.8		V_{PP}
V_{DCIN}	DC Level Input		1.3		V
I_{IN}	Input Bias Current ($V_{DC} = V_{DCIN} + 1.5 V_{DC}$)		3		μA

ELECTRICAL CHARACTERISTICS (continued)T_{amb} = 25°C ; V_{CC} = 8V (unless otherwise specified)**SWITCHED OUTPUT** (pin 6)

Symbol	Parameter	Min.	Typ.	Max.	Unit
	Video Output Swing	3	3.6		V _{PP}
	DC Level Output		1.3		V
	Video Gain (pin 6 versus pin 3 or pin 8, measured at 100KHZ, 1 V _{PP} input signal)	5.5	6	6.5	dB
	Video Bandwidth (pin 6 versus pin 3 or pin 8, 1VPP input signal, load 150Ω)	15	20		MHZ
	Output Impedance (measured pin 6)		15		Ω

EXTERNAL OUTPUT (pin 2)

Symbol	Parameter	Min.	Typ.	Max.	Unit
	Video Output Swing	3	3.6		V _{PP}
	DC Level Output		1.3		V
	Video Gain (pin 2 versus pin 3, measured at 100KHZ, 1 V _{PP} input signal)	5.5	6	6.5	dB
	Video Bandwidth (pin 2 versus pin 3, 1VPP input signal, load 150Ω)	15	20		MHZ
	Output Impedance (measured pin 2)		15		Ω

SWITCHING INPUT (pin 5)

Symbol	Parameter	Min.	Typ.	Max.	Unit
	Output Current Selection Pin			5	μA
	Threshold Voltage		4		V
	Max DC Level			V _{CC}	V

OTHER DYNAMIC FEATURES

Symbol	Parameter	Min.	Typ.	Max.	Unit
	Supply Voltage Rejection (measured pin 2 or pin 6 at 1KHZ)		40		dB
	Crosstalk (between any input, measured at 1MHZ)		- 50		dB

PACKAGE MECHANICAL DATA

8 PINS - PLASTIC DIP

