

## Schmitt Triggers

### Single Channel DIP

Part Number	Features	Turn-on Threshold Current R <sub>L</sub> =270Ω V <sub>CC</sub> =5V Max(mA)	Isolation Breakdown Voltage (KV)	Continuous Forward Current Max (mA)	V <sub>F</sub> (LED) I <sub>F</sub> =10μA Min (V)	Turn-off Threshold Current R <sub>L</sub> =270Ω, V <sub>CC</sub> =5V Min (mA)	Output Voltage (low) R <sub>L</sub> =270Ω V <sub>CC</sub> =5V Max(V)	Schematic Number/ Package Number	Available Safety Approvals									
									U L	C S A	V D E	B S I	N E M K O	D E M K O	S E M K O	F I M K O		
H11L1	Microprocessor Compatible	1.6	7.5 (pk) 5.3(rms)	60	3	0.3	0.4	15 / 3	X	p	X							
H11L2		10.0							X	p	X							
H11L3		5.0							X	p	X							
H11L4		2.0							X	p	X							
IS609		1.6							X	p	X							
MOC5007		1.6							X	p								
MOC5008		4.0							X	p								
MOC5009		10.0							X	p								

## AC Input

### Single Channel, 6 and 4 Pin DIP

Part Number	Features	Current Transfer Ratio I <sub>F</sub> = 10 mA Min (%)	Isolation Breakdown Voltage (KV)	Continuous Forward Current Max (mA)	V <sub>F</sub> (LED) I <sub>F</sub> = 10mA Max (V)	BV <sub>CEO</sub> I <sub>C</sub> =1mA Min (V)	I <sub>CEO</sub> (max) V <sub>CE</sub> =10V Max (nA)	V <sub>CE</sub> (sat) I <sub>F</sub> = 10mA I <sub>C</sub> =0.5mA Max (V)	Schematic Number/ Package Number	Available Safety Approvals									
										U L	C S A	V D E	B S I	N E M K O	D E M K O	S E M K O	F I M K O		
H11AA1	6pin DIP AC Input Isolators	20	7.5 (pk) 5.3 (rms)	100	1.5	30	50	0.4	32 / 3	X	p	X							
H11AA2		10								X	p	X							
H11AA3		50								X	p	X							
H11AA4		100								X	p	X							
CNY35		10								X	p	X							
IS604		50								X	p	X							
IS733		15-300								X	p								
ISP814	4 pin DIP AC Input Isolators	20 - 300 (I <sub>F</sub> = 1mA)	7.5 (pk) 5.3 (rms)	50	1.4 (I <sub>F</sub> = 20mA)	35	100 (V <sub>CE</sub> =20V)	0.2 (I <sub>F</sub> = 20mA I <sub>C</sub> = 1mA)	34 / 12	X	X	p	p	X	X	X	X		
ISP620-1		50 - 600			1.3			55 (I <sub>C</sub> =0.5mA)		100 (V <sub>CE</sub> =24V)	0.4 (I <sub>F</sub> = 8mA I <sub>C</sub> = 2.4mA)	X	X	p	p	X	X	X	X
ISP626-1		100 / 50 (I <sub>F</sub> = 1 / 0.5)				1.4	80				100 (V <sub>CE</sub> =40V)	0.4 (I <sub>F</sub> = 1mA)	X	X	p	p	X	X	X
PS2505-1		80-600 <sup>3</sup>			1.65 (I <sub>F</sub> = 50mA)			70		50		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)	X	X	p	p	p	p	p
SFH620-1		40-125				1.65 (I <sub>F</sub> = 50mA)	70				50		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)	X	X	p	p	p	p
SFH620-2		63-200			100			50		100		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)		X	X	p	p	p	p
SFH620-3		100-320				100	50				100		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)	X	X	p	p	p	p
SFH620A-1		40-125			100			50		100		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)		X	X	p	p	p	p
SFH620A-2		63-200				100	50				100		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)	X	X	p	p	p	p
SFH620A-3		100-320			100			50		100		0.4 (I <sub>F</sub> = 10mA I <sub>C</sub> = 2.5mA)		X	X	p	p	p	p

**Note 1:** X - Approved, p - Pending approval. For full ordering instructions, please see page 36

**Note 2:** EN60950 obtained through NEMKO

**Note 3:** Test condition: I<sub>F</sub> = 5mA, V<sub>CE</sub> = 5V

# ISOCON COMPONENTS

## Single Channel 6 And 4 Pin AC Input cont.

Part Number	Features	Current Transfer Ratio $I_F = 1 \text{ mA}$ $V_{CE} = 0.5 \text{ V}$ Min (%)	Isolation Breakdown Voltage (KV)	Continuous Forward Current Max (mA)	$V_F$ (LED) $I_F = 10 \text{ mA}$ Max (V)	$BV_{CBO}$ $I_C = 0.5 \text{ mA}$ Min (V)	$I_{CBO}$ (Dark) $V_{CE} = 10 \text{ V}$ Max (nA)	$V_{CE}$ (on) $I_F = 10 \text{ mA}$ $I_C = 0.5 \text{ mA}$ Max (V)	Schematic Number / Package Number	Available Safety Approvals																
										UL	CSA	VDE	BSI	NEC	EN	CE	FM	UL	CSA	VDE	BSI					
SFH628-2	4 Pin DIP AC Input Isolators	63-200	7.5 (pk) 5.3 (rms)	50	1.5 ( $I_F = 5 \text{ mA}$ )	55 ( $I_C = 1 \text{ mA}$ )	200	0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )	5 / 12	X	X	p	p	p	p	p	p	p	p	p						
SFH628-3		100-320						0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.8 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	
SFH628-4		160-500						0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 1.25 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
SFH628A-2		63-200						0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
SFH628A-3		100-320						0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.8 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
SFH628A-4		160-500						0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 1.25 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
TIL194		20 <sup>3</sup>			1.4 ( $I_F = 20 \text{ mA}$ )	35	100 ( $V_{CE} = 24 \text{ V}$ )	0.4 ( $I_F = 5 \text{ mA}$ ) ( $I_C = 1 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p			
TIL194A		50 <sup>3</sup>								X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	
TIL194B		100 <sup>3</sup>								X	X	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
TLP620		50 - 600 <sup>3,4</sup>			1.3	55	100 ( $V_{CE} = 24 \text{ V}$ )	0.4 ( $I_F = 8 \text{ mA}$ ) ( $I_C = 2.4 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p	p			
TLP626	100-1200	0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )	X	X				p	p	p	p	p	p	p	p	p	p	p	p	p	p					

## Dual and Quad Channel AC Input

Part Number	Features	Current Transfer Ratio $I_F = 10 \text{ mA}$ $V_{CE} = 5 \text{ V}$ Min (%)	Isolation Breakdown Voltage (KV)	Continuous Forward Current Max (mA)	$V_F$ (LED) $I_F = 10 \text{ mA}$ Max (V)	$BV_{CBO}$ $I_C = 1 \text{ mA}$ Min (V)	$I_{CBO}$ (Dark) $V_{CE} = 10 \text{ V}$ Max (nA)	$V_{CE}$ (on) $I_F = 10 \text{ mA}$ $I_C = 0.5 \text{ mA}$ Max (V)	Schematic Number / Package Number	Available Safety Approvals												
										UL	CSA	VDE	BSI	NEC	EN	CE	FM	UL	CSA	VDE	BSI	
ISP824	Two Independent AC Input Isolators in one 8 Pin DIP Package	20 - 300 ( $I_F = 1 \text{ mA}$ )	7.3 (pk)	50	1.4 ( $I_F = 20 \text{ mA}$ )	35	100 ( $V_{CE} = 20 \text{ V}$ )	0.2 ( $I_F = 20 \text{ mA}$ ) ( $I_C = 1 \text{ mA}$ )	4 / 13	X	X	p	p	p	p	p	p	p	p	p		
ISP620-2		50 - 600 <sup>4</sup> ( $I_F = 5 \text{ mA}$ )			1.3	55 ( $I_C = 0.5 \text{ mA}$ )	100 ( $V_{CE} = 20 \text{ V}$ )	0.4 ( $I_F = 8 \text{ mA}$ ) ( $I_C = 2.4 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	
ISP626-2		100-1200 ( $I_F = 1 \text{ mA}$ )					100 ( $V_{CE} = 24 \text{ V}$ )	0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p
PS2505-2		80 - 600 <sup>3</sup>			1.4	80	100 ( $V_{CE} = 40 \text{ V}$ )	0.3 ( $I_F = 10 \text{ mA}$ ) ( $I_C = 2 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p
TLP620-2		50 - 600 <sup>4</sup> ( $I_F = 5 \text{ mA}$ )			1.3	55 ( $I_C = 0.5 \text{ mA}$ )	100 ( $V_{CE} = 20 \text{ V}$ )	0.4 ( $I_F = 8 \text{ mA}$ ) ( $I_C = 2.4 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p
TLP626-2		100-1200 ( $I_F = 1 \text{ mA}$ )					100 ( $V_{CE} = 24 \text{ V}$ )	0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p
ISP844	Four Independent AC Input Isolators in one 16 Pin DIP Package	20 - 300 ( $I_F = 1 \text{ mA}$ )	5.3 (rms)	50	1.4 ( $I_F = 20 \text{ mA}$ )	35	100 ( $V_{CE} = 20 \text{ V}$ )	0.2 ( $I_F = 20 \text{ mA}$ ) ( $I_C = 1 \text{ mA}$ )	6 / 14	X	X	p	p	p	p	p	p	p	p	p		
ISP620-4		50 - 600 <sup>4</sup> ( $I_F = 5 \text{ mA}$ )			1.3	55 ( $I_C = 0.5 \text{ mA}$ )	100 ( $V_{CE} = 20 \text{ V}$ )	0.4 ( $I_F = 8 \text{ mA}$ ) ( $I_C = 2.4 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	
ISP626-4		100 - 1200 ( $I_F = 1 \text{ mA}$ )					100 ( $V_{CE} = 24 \text{ V}$ )	0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p
PS2505-4		80 - 600 <sup>3</sup>			1.4	80	100 ( $V_{CE} = 40 \text{ V}$ )	0.3 ( $I_F = 10 \text{ mA}$ ) ( $I_C = 2 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	
TLP620-4		50 - 600 <sup>4</sup> ( $I_F = 5 \text{ mA}$ )			1.3	55 ( $I_C = 0.5 \text{ mA}$ )	100 ( $V_{CE} = 20 \text{ V}$ )	0.4 ( $I_F = 8 \text{ mA}$ ) ( $I_C = 2.4 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p
TLP626-4		100 - 1200 ( $I_F = 1 \text{ mA}$ )					100 ( $V_{CE} = 24 \text{ V}$ )	0.4 ( $I_F = 1 \text{ mA}$ ) ( $I_C = 0.5 \text{ mA}$ )		X	X	p	p	p	p	p	p	p	p	p	p	p

**Note 1:** X - Approved, p - Pending approval. For full ordering instructions, please see page 36

**Note 3:** Test condition:  $I_F = 5 \text{ mA}$

**Note 4:** CTR selection: "GB" -100% Min, "BL" -200% Min