

SMO-L TTL 787AH Series

Features

- TTL logic output
- Reduced EMI
- Ceramic package (No bump or with bump)
- Space savings
- Available on 24 mm Tape & Reel
- Enable/Disable feature

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Supply voltage	V_{CC}	-0.5 to +7.0	V
Input voltage	V_{IN}	-0.5 to $V_{CC} + 0.5$	V
Output voltage	V_O	-0.5 to $V_{CC} + 0.5$	V
Input current	I_{IN}	± 10	mA
Output current	I_O	± 25	mA
Storage temperature	T_{stg}	-55 to +125	$^{\circ}\text{C}$
Soldering condition	T_{sol} T	260/230 20/180	$^{\circ}\text{C}$ sec

Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Frequency range	F_O	0.75	—	33	MHz	
Frequency stability	$\Delta F/F_O$	-100	—	100	ppm	*1
Operating temperature	T_{opr}	0	25	70	$^{\circ}\text{C}$	
Operating voltage	V_{CC}	4.5	5.0	5.5	V	DC
Operating current	I_{CC}	—	—	*3	mA	$V_{CC} = 5.5\text{V}$
Input voltage	V_{IH} V_{IL}	2.0 —	— —	— 0.8	V V	#1: V_{IH} or OPEN $\rightarrow$ Enable #1: V_{IL} or GND $\rightarrow$ Disable
Output voltage	V_{OH} V_{OL}	4.0 —	— —	— 0.4	V V	$I_{OH} = -4\text{ mA}$ $I_{OL} = 16\text{ mA}$
Symmetry	SYM	40	50	60	%	at 1.4V
Rise/Fall time	t_r, t_f	—	—	*3	ns	at 0.4V to 2.4V/at 2.4 V to 0.4V
Fanout	n	—	—	10	—	1.6 mA/gate
Start-up time	t_{st}	—	—	4 10	ms ms	0.75 to 26 MHz *2 26+ to 33 MHz *2

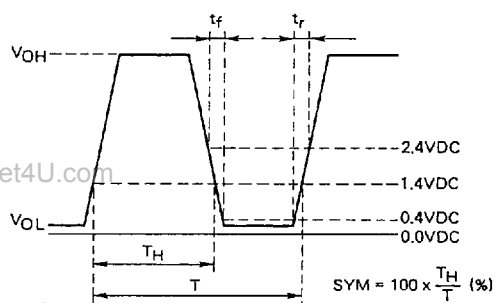
*1 Inclusive of calibration tolerance at 25 $^{\circ}\text{C}$, operating temperature, operating voltage range, load change, aging, shock and vibration.

*2 Rise time (0 to 4.5V) of $V_{CC} > 150\text{ }\mu\text{s}$

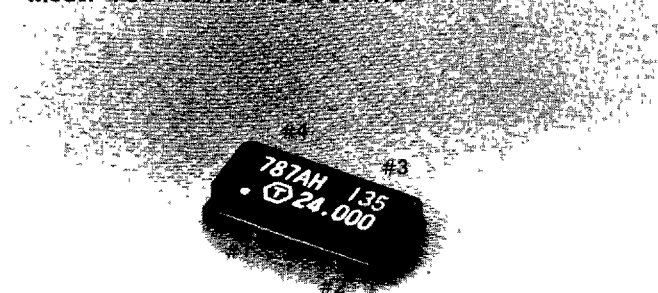
*3

Freq.	0.75 to 10	10+ to 26	26+ to 33	MHz
I_{CC}	10	18	25	mA
t_r, t_f	8	8	8	ns

Output waveform



Model TCO-787AH TCO-787AHB



SMO-LN

Dimensions

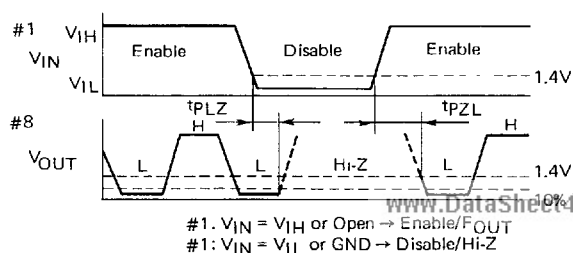
12.1x5.8x2.5 max. [LN] or 2.7 max. [LB] (mm)

.476x.228x.098 max. [LN] or .106 max. [LB] (inch)

Pin Connections

#4 V_{CC} #3 OUTPUT

#1 E/D #2 GND

Enable/Disable ($t_{PLZ}, t_{PZL} \leq 100\text{ ns}$)

#1: $V_{IN} = V_{IH}$ or Open $\rightarrow$ Enable/ F_{OUT}
 #1: $V_{IN} = V_{IL}$ or GND $\rightarrow$ Disable/ H_i-Z

Test circuit DataSheet4U.com

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