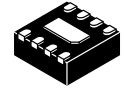


3.3 V/5 V ECL Differential Receiver/Driver

MC10EP16, MC100EP16



TSSOP 8
 DT SUFFIX
 CASE 948R 02

DFN8
 DFN8

Description

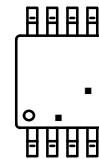
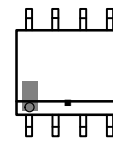
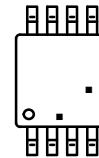
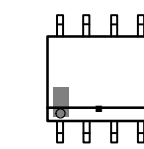
The EP16 is a world class differential receiver/driver. The device is functionally equivalent to the EL16 and LVEL16 devices with higher performance capabilities. With output transition times significantly faster than the EL16 and LVEL16, the EP16 is ideally suited for interfacing with high frequency sources.

The V_{BB} pin, an internally generated voltage supply, is available to this device only. For single-ended input conditions, the unused differential input is connected to V_{BB} as a switching reference voltage. V_{BB} may also rebias AC coupled inputs. When used, decouple V_{BB} and V_{CC} via a 0.01 μ F capacitor and limit current sourcing or sinking to 0.5 mA. When not used, V_{BB} should be left open.

Under open input conditions (pulled to V_{EE}) internal input clamps will force A_{gr} output LOW.P

u

MARKING DIAGRAM



b

c

ORDERING INFORMATION

MC10EP16, MC100EP16

Table 3. MAXIMUM RATINGS

Symbol	Parameter	Condition 1	Condition 2	Rating	Unit
--------	-----------	-------------	-------------	--------	------

MC10EP16, MC100EP16

Table 5. 10EP DC CHARACTERISTICS, PECL

Symbol	Characteristic	40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	

MC10EP16, MC100EP16

Table 7. 100EP DC CHARACTERISTICS, PECL

Symbol	Characteristic	40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
											μ
											μ
	-	-			-			-			

Ω -

-

Table 8. 100EP DC CHARACTERISTICS, PECL

Symbol	Characteristic	40°C			25°C			85°C	
		Min	Typ	Max	Min	Typ	Max		

MC10EP16, MC100EP16

Table 9. 100EP DC CHARACTERISTICS, NECL

Symbol	Characteristic	40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
		-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	

MC10EP16, MC100EP16

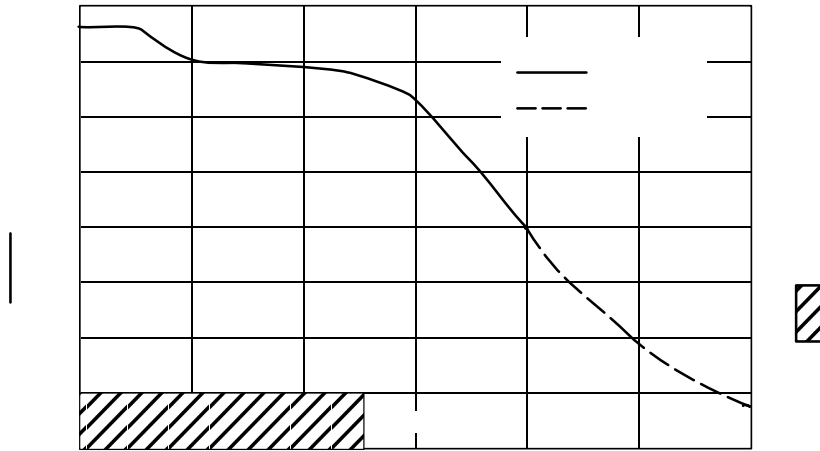
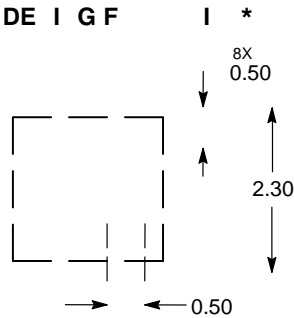


Figure 2. F_{\max}/Jitter

DF 82[2, 0.5
CASE 506AA
ISSUE F

1
CA E 4:1

DATE 04 MAY 2016

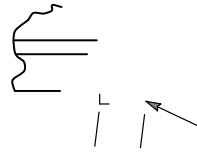
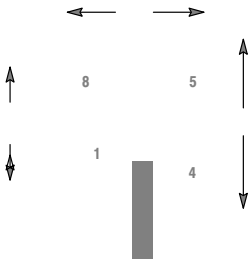


DIMENSIONS: MILLIMETERS

*For additional information on our Pb-Free strategy and soldering details, please download the [m\] □ Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.](#)

SOIC 8 NB
CASE 751-07
ISSUE AK

DATE 16 FEB 2011



SEATING
PLANE



onsemi, **onsemi**, and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "**onsemi**" or its affiliates and/or subsidiaries in the United States and/or other countries. **onsemi** owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of **onsemi**'s product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. **onsemi** reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and **onsemi** makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does **onsemi** assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using **onsemi**
