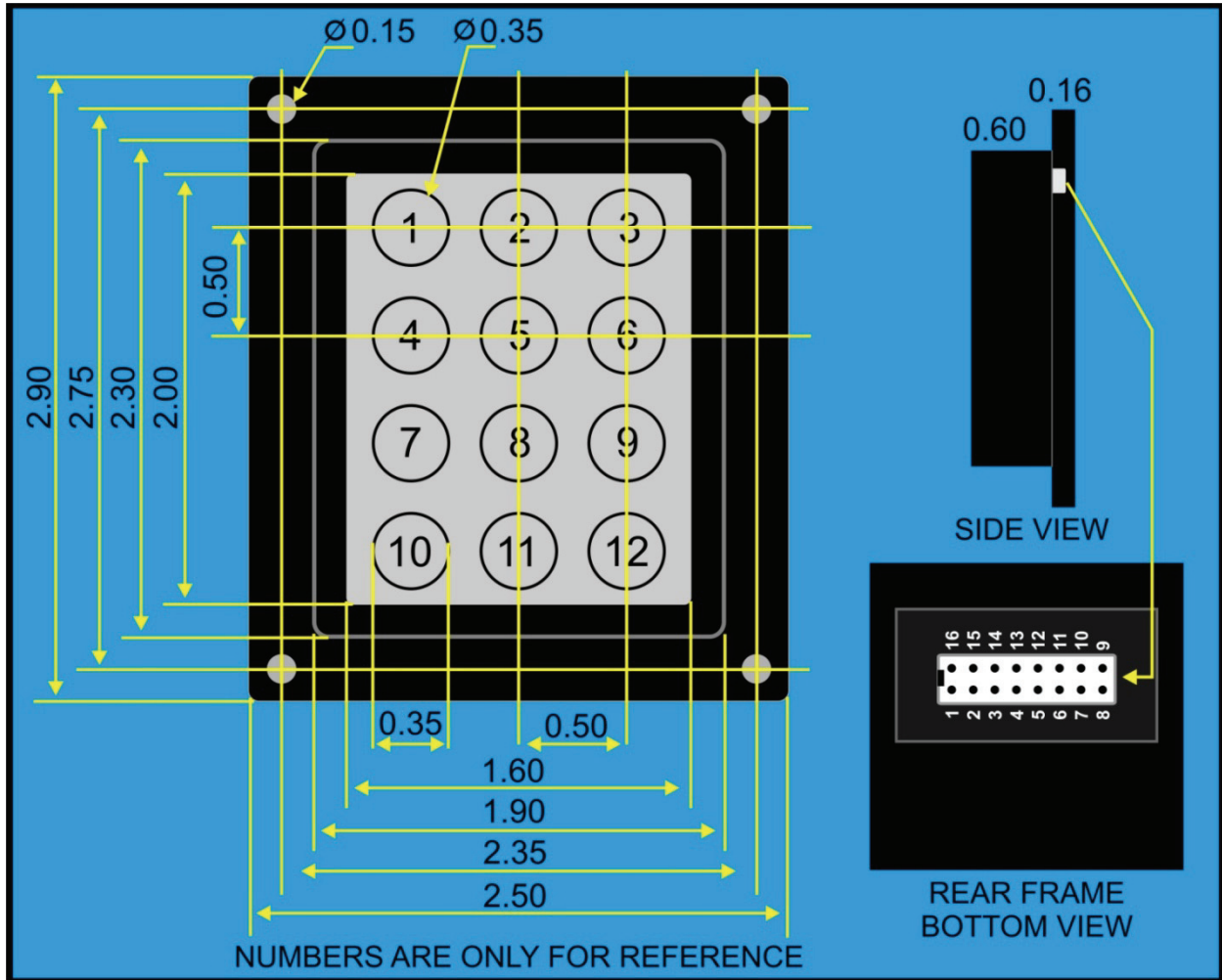




3X4 KEYPAD MODEL ZSKP12

DIMENSIONS in inches



DC Characteristics

Symbol	Parameter	Min	Typ	Max	Units
V <sub>CC</sub>	Supply Voltage	4.8	5	8	Volts
I <sub>CC</sub>	Supply current V <sub>CC</sub> = 5 Volts w/o LEDs		1.5	3	mA
I <sub>CC</sub>	Supply current V <sub>CC</sub> = 5 Volts w LEDs		20	25	mA
V <sub>IL</sub>	Input Low Level	-0.6		1.2	Volts
V <sub>IH</sub>	Input High Level	3	5	5.5	Volts
V <sub>OL</sub>	Output Low Level I <sub>OL</sub> = 2.1 mA			0.4	Volts

The connector is a dual row male 16 pin with a 0.1" X 0.1" matrix located at the bottom side of the card, accessible through a hole in the plastic frame. A standard 16 lines flat ribbon cable with 0.1" pitch is used to connect the keypad to the host. Maximum cable length should be one foot (30 cms). Longer cables are not recommended.



CONNECTOR PIN-OUT

PIN	DESCRIPTION
1,16	<b>V<sub>CC</sub></b> 5 to 8 Volts D.C. inputs
7,8,9,10	<b>G<sub>ND</sub></b> Ground inputs
2,3,4,5,6	<b>D0-D4</b> Tri-state open drain outputs. When EN and ST are high, the hex number of the key pressed is reflected in these outputs until the key is released. 00 = No key pressed. D4 is not used by the 12 and 16 keys keypads and remains in Hi-Z state.
11	<b>ST</b> Active high open drain output. Goes high when a key is pressed and low when it is released.
12	<b>EN</b> Active high enable input. When EN is high the data pins reflect the hex value of the key pressed. When low, the data pins remain in Hi-Z state.
13	<b>-S/P</b> High for parallel (Default), low for serial communication. Should be tied to VCC or GND pins.
14	<b>TX</b> TTL level open drain output. RS232 compatible asynchronous serial transmit data line from the keypad to the host. ST pin is also available as an active high interrupt output to the host and can be optionally used.
15	<b>RX</b> TTL level input. RS232 compatible asynchronous serial receive data line from the host to the keypad.