

**JOC244**

Rev.A.1.0

**DESCRIPTION:**

The JOC244 is a four channel photoelectric coupler composed of light-emitting diode and photo transistor. It is packaged in a 16-pin at SSOP16. The products are widely used in switching power supply, intelligent meter, industrial control, measuring instruments, office equipment such as copiers, household appliances such as air conditioners, fans, water heaters, etc.

**MAIN FEATURES**

Current transfer ratio: 50%~300% ( $I_F = \pm 1\text{mA}$ ,  $V_{CE} = 5\text{V}$ ,  $T_a = 25^\circ\text{C}$ ),

100%~400% ( $I_F = \pm 5\text{mA}$ ,  $V_{CE} = 5\text{V}$ ,  $T_a = 25^\circ\text{C}$ )

High isolation voltage between input and output ( $V_{ISO} = 3750\text{ V}_{rms}$ )

Collector-emitter breakdown voltage  $BV_{CEO} = 80\text{V}$

Operating temperature range  $-55^\circ\text{C}$  to  $110^\circ\text{C}$

UL VDE CQC approvals

**ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)**

Parameter		Symbol	Value	Unit
Input	Forward Current	$I_F$	$\pm 60$	mA
	Peak Forward Current	$I_{FP}$	$\pm 1$	A
	Power Dissipation	$P_I$	100	mW
Output	Collector-emitter Voltage	$V_{CEO}$	80	V
	Emitter-collector Voltage	$V_{ECO}$	6	V
	Collector Current	$I_C$	50	mA
	Power Dissipation	$P_O$	150	mW
Total Power Dissipation		$P_{tot}$	200	mW
Isolation Voltage		$V_{iso}$	3750	V <sub>rms</sub>
Operating Temperature		$T_{opr}$	-55~+110	
Storage Temperature		T		

**ELECTRICAL CHARACTERISTICS (Temperature=25°C)**

**Parameter**



Characteristics Curves

**FIG.1:** Forward Current vs. Ambient Temperature



**FIG.2:** Collector Power Dissipation vs. Ambient Temperature

**JOC**

Test Circuits

FIG.11: Test Circuits of Response Time

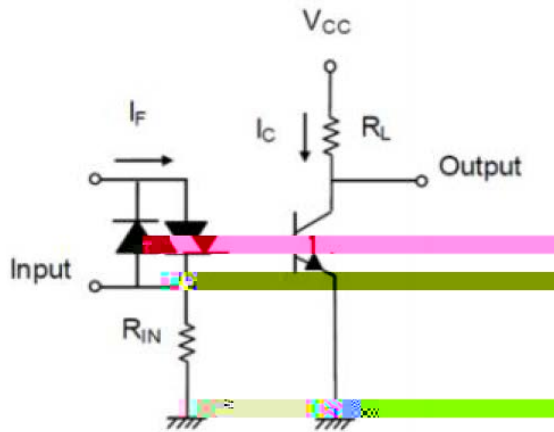


FIG.12: Curves of Response Time

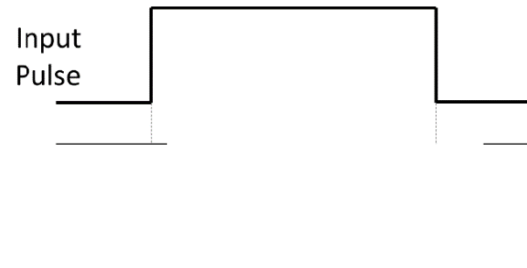
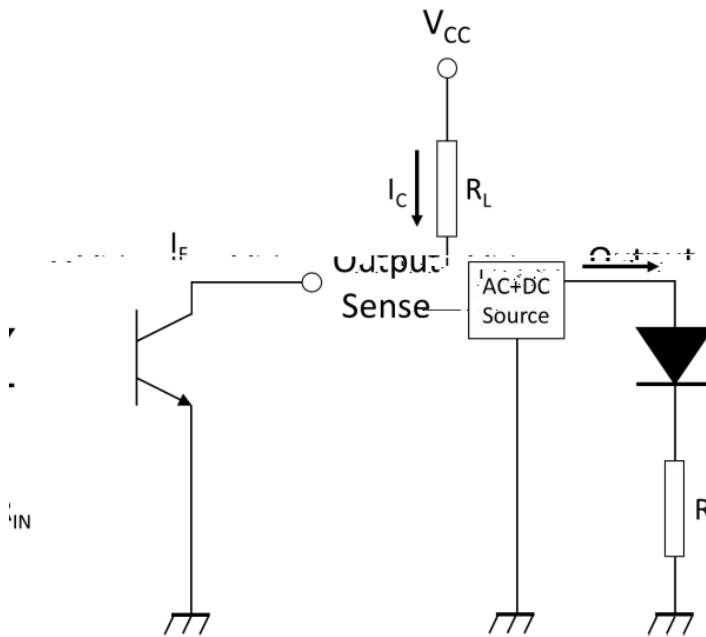
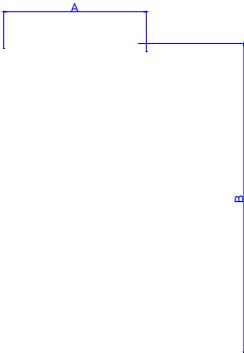


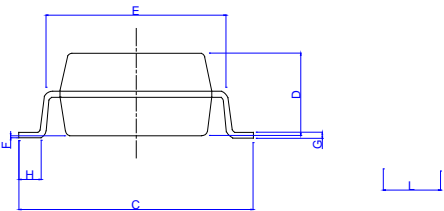
FIG.13: Test Circuits of Frequency Response



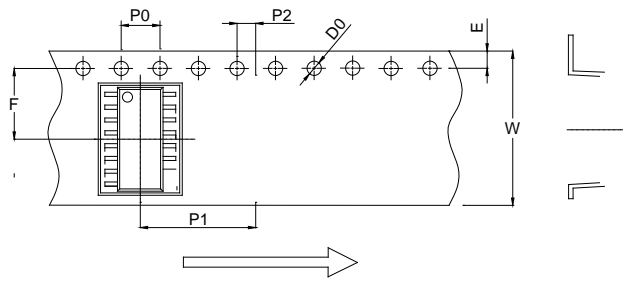
Package Dimension (Unit: mm)



Dimensions



CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0						
W						



