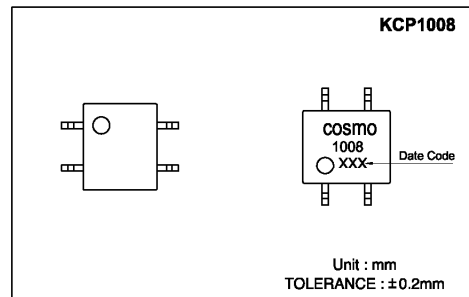


## Features

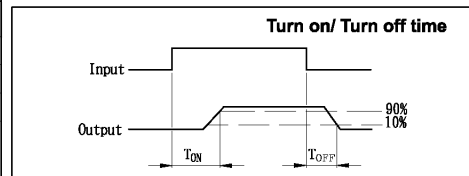
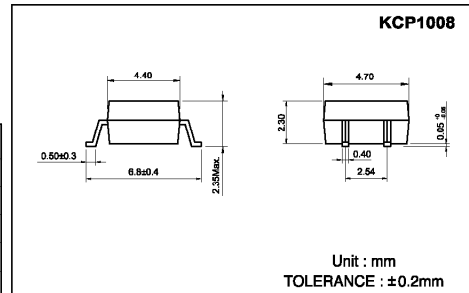
1. Normally Open, Single Pole Single Throw
2. Control 100VAC or DC Voltage
3. Switch 150mA Loads
4. LED control Current, 2mA
5. Low ON-Resistance
6.  $dv/dt$ , >500V/ms
7. Isolation Test Voltage, 1500VACrms



## Absolute Maximum Ratings

( $T_a=25^\circ\text{C}$ )

Emitter ( Input )	Detector ( Output )
Reverse Voltage..... 5.0V	Output Breakdown Voltage..... ±100V
Continuous Forward Current..... 50mA	Continuous Load Current..... ±150mA
Peak Forward Current..... 1A	Power Dissipation..... 500mW
Power Dissipation..... 100mW	
Derate Linearly from 25°C..... 1.3mW/°C	
General Characteristics	
Isolation Test Voltage..... 1500VACrms	Storage Temperature Range... -40°C to +150°C
Isolation Resistance	Operating Temperature Range... -40°C to +85°C
$V_{IO}=500\text{V}$ , $T_a=25^\circ\text{C}$ ..... $\geq 10^{10} \Omega$	Junction Temperature..... 100°C
Total Power Dissipation..... 500mW	Soldering Temperature,
Derate Linearly from 25°C..... 2.5mW/°C	2mm from case, 10 sec..... 260°C



## Electro-optical Characteristics

( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
<b>Emitter (Input)</b>						
Forward Voltage	$V_F$	$I_F = 10\text{mA}$		1.2	1.5	V
Operation Input Current	$I_{FON}$	$V_L = \pm 20\text{V}$ , $I_L = 100\text{mA}$ , $t = 10\text{ms}$			2	mA
Recovery Input Current	$I_{FOFF}$	$V_L = \pm 20\text{V}$ , $I_L \leq 5\mu\text{A}$	0.2			mA
<b>Detector (Output)</b>						
Output Breakdown Voltage	$V_B$	$I_B = 50\mu\text{A}$	100			V
Output Off-State Leakage	$I_{TOFF}$	$V_T = 100\text{V}$ , $I_F = 0\text{mA}$		0.2	1	$\mu\text{A}$
I/O Capacitance	$C_{ISO}$	$I_F = 0$ , $f = 1\text{MHz}$		6		pF
ON Resistance	$R_{ON}$	$I_L = 100\text{mA}$ , $I_F = 10\text{mA}$		6	8	$\Omega$
Turn-On Time	$T_{ON}$	$I_F = 10\text{mA}$ , $V_L = \pm 20\text{V}$		0.3	2.0	ms
Turn-Off Time	$T_{OFF}$	$t = 10\text{ms}$ , $I_L = \pm 100\text{mA}$		0.3	1.0	ms

## Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Connection	Wiring Diagrams
KCP1008		1a	AC/DC	—	

## Data Curve

