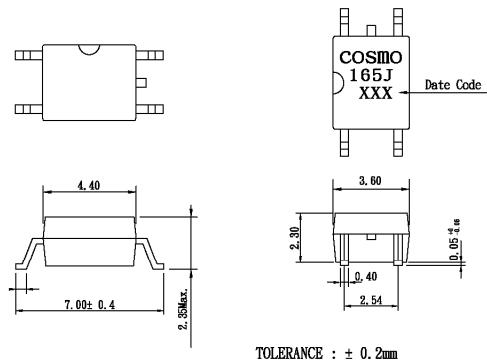


## Features

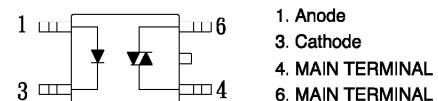
1. Opaque type, mini-flat package.
2. Subminiature type  
(The volume is smaller than that of our conventional DIP type by as far as 30%)
3. Isolation voltage between input and output (Viso:2500Vrms).



## For 115/240 Vac (rms) Application:

1. Solenoid/Valve Controls.
2. Lighting Controls.
3. Static Power Switches.
4. AC Motor Drives.
5. Temperature Controls.
6. E.M. Contactors.
7. AC Motor Stators.
8. Solid State Relays.
9. Programmable controllers.

## Schematic:Top View



## Absolute Maximum Ratings

(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward current	I <sub>F</sub>	50	mA
	Peak forward current (100us)	I <sub>FM</sub>	1	A
	Reverse voltage	V <sub>R</sub>	6	V
	Power dissipation	P <sub>D</sub>	70	mW
Output	Off-State Output Terminal voltage	V <sub>DRM</sub>	600	V <sub>peak</sub>
	On-State R. M. S. Current	I <sub>T(RMS)</sub>	70	mA
	Peak Repetitive Surge Current (PW=10ms, DC 10%)	I <sub>TSM</sub>	1	A
	Power dissipation	P <sub>D</sub>	150	mW
	Total power dissipation	P <sub>tot</sub>	200	mW
	Isolation voltage 1 minute	V <sub>iso</sub>	2500	V <sub>rms</sub>
	Operating temperature	T <sub>opr</sub>	-40 to +100	°C
	Storage temperature	T <sub>tsg</sub>	-50 to +125	°C
	Soldering temperature 10 second	T <sub>sol</sub>	260	°C

## Electro-optical Characteristics

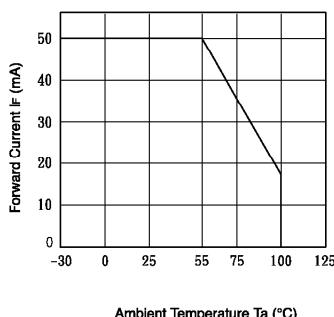
(Ta=25°C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	—	1.2	1.4	V
	Peak forward voltage	V <sub>FM</sub>	I <sub>FM</sub> =0.5A	—	—	3.5	V
	Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V	—	—	10	μA
Output	Peak Blocking Current	I <sub>DRM</sub>	V <sub>DRM</sub> =600V	—	—	1.0	μA
	ON-State Voltage	V <sub>TM</sub>	I <sub>TM</sub> =70mA	—	1.6	2.8	V
Transfer characteristics	Holding Current	I <sub>H</sub>		—	1.0	—	mA
	Critical rate of rise of OFF-state voltage	dV/dt	V <sub>DRM</sub> =(1/J2)*Rated	600	—	—	V/μS
	Isolation resistance	R <sub>iso</sub>	DC500V	5x10 <sup>10</sup>	10 <sup>11</sup>	—	ohm
	Minimum trigger current	I <sub>FT</sub>	Main Terminal Voltage=3V	—	5	10	mA
	Turn-on time	T <sub>on</sub>	V <sub>D</sub> =6V, R <sub>L</sub> =100 ohm, I <sub>F</sub> =20mA	—	—	100	μS

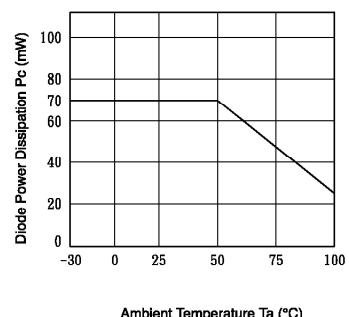
Classification table of Trigger LED current is shown below.

Classification	Trigger LED Current (mA)	
	Min.	Max.
1 (Standard)	-	10
2	-	7
3	-	5

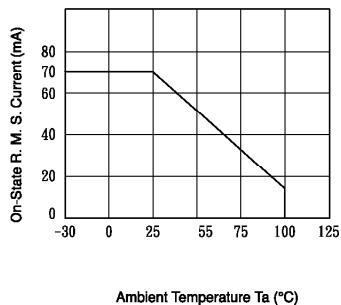
**Fig.1** Forward Current vs. Ambient Temperature



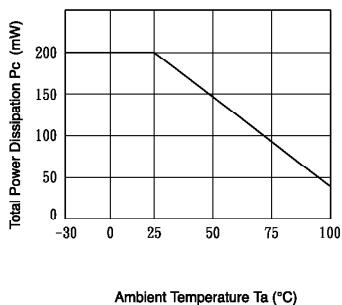
**Fig.2** Diode Power Dissipation vs. Ambient Temperature



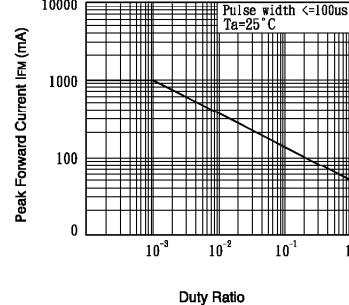
**Fig.3** On-State R. M. S. Current vs. Ambient Temperature



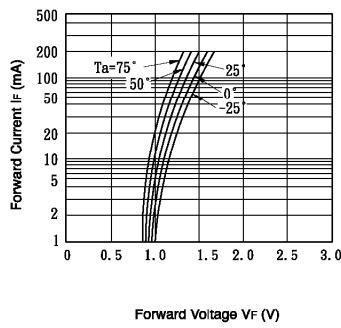
**Fig.4** Total Power Dissipation vs. Ambient Temperature



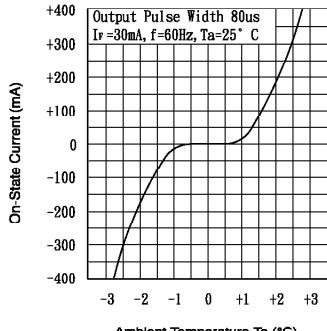
**Fig.5** Peak Forward Current vs. Duty Ratio



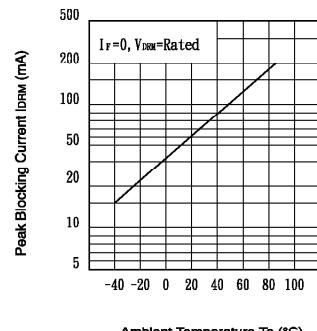
**Fig.6** Forward Current vs. Forward Voltage



**Fig.7** On-State Characteristics



**Fig.8** Leakage with LED off vs. Ambient Temperature



**Fig.9** Trigger Current vs. Ambient Temperature

