



The products are 4-pin thyristor opto-couplers. The device combines an AlGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon zero-crossing photo triac in a plastic SOP4 package. The products are widely used in solenoid/valve controls, lighting controls, motor controls, temperature controls, static AC power switches, solid state relays, interfacing microprocessors up to 265 V<sub>AC</sub> peripherals.

High isolation 3750 VRMS

DC input with zero-crossing photo triac output

Operating temperature range -55 to 110

REACH & RoHS compliance

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Operating Temperature	$T_{opr}$	-55~110	
Junction Temperature	$T_j$	125	
Storage Temperature	$T_{stg}$	-55~125	
Soldering Temperature	$T_{sol}$	260	
Peak pulse voltage ( $T_j=25$ ; non-repetitive,off-state)	$V_{pp}$	1	kV

: 100 $\mu$ s pulse, 100Hz frequency

: AC for 1minute, R.H.=40~60%

(Temperature=25°C)

Input	Forward Voltage		$V_F$	$I_F=10mA$	-	1.2	1.5	V
	Reverse Current		$I_R$	$V_R=6V$	-	-	1	$\mu A$
	Input Capacitance		$C_{in}$	$V=0, f=1kHz$	-	10	-	pF
Output	Peak Off-state Current, Either Direction		$I_{OFF}$	$V_{OFF}=\text{Rated } V_{OFF}$ $I_F=0$	-	-	100	nA
	Peak On-state Voltage, Either Direction		$V_{TM}$	$I_{TM}=100mA$	-	1.8	2.5	V
	Critical Rate of Rise of Off-state voltage		dV/dt	$V_{PEAK}=\text{Rated } V_{PEAK}$ $I_F=0$	2000	-	-	V/ $\mu$ s
Transfer Characteristics	LED Trigger Current	JOCSZ21A JOCSZ31A	$I_{FT}$	Terminal Voltage=3V $I_{TM}=100mA$	-	-	10	mA
		JOCSZ21B JOCSZ31B			-	-	5	
		JOCSZ21C JOCSZ31C			-	-	3	
		Holding Current			$I_H$	$I_{TM}=2mA,$ $I_F=\text{Rated } I_{FT}$	-	
	Isolation Resistance		$R_{ISO}$	DC500V 40~60%R.H.	$10^{12}$	$10^{14}$	-	
	Floating Capacitance		$C_{IO}$	$V=0,$ $f=1MHz$	-	10	-	pF
	Response Time		$t_{on}$	$V_D=6V,$ $R_L=100$ , $I_F=20mA$	-	15	50	$\mu$ s
Zero-Crossing Characteristics	Inhibit Voltage		$V_{IH}$	$I_F=\text{Rated } I_{FT}$	-	-	20	V
	Leakage in Inhibited State		$I_{OFF2}$	$I_F=\text{Rated } I_{FT}$ $V_{OFF}=\text{Rated } V_{OFF}$	-	-	5	mA

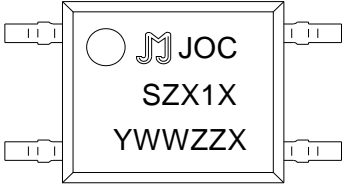
: Test voltage must be applied within dV/dt ratings

: Refer to Fig.14 & Fig.15



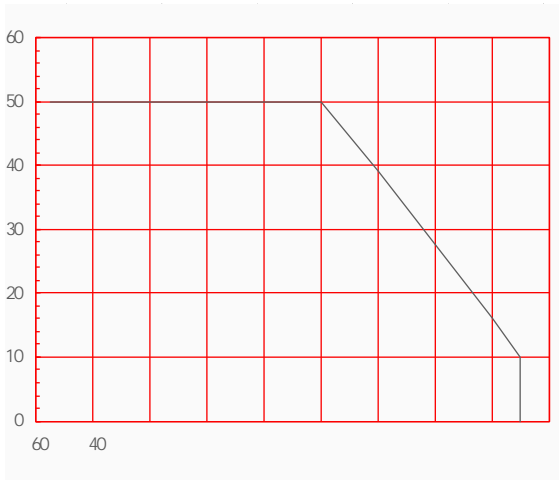
<u>J</u>	<u>OC</u>	<u>S</u>	<u>Z</u>	<u>2</u>	<u>1</u>	<u>A</u>	<u>-M4</u>	<u>/</u>
JieJie Microelectronics Co., Ltd.	Opto Coupler	SCR	Zero-crossing				SOP4	None:T1 R:T2
						A:I <sub>FT</sub> 10mA B:I <sub>FT</sub> 5mA C:I <sub>FT</sub> 3mA		
						I <sub>T(RMS)</sub> :100mA		
						2:V <sub>OFF</sub> 600V		
						3:V <sub>OFF</sub> 800V		

None/R	3000 Units/Reel

	<p><u>YWWZZX</u></p> <p>LOT NO.</p>
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Max. Allowable LED Forward Current vs. Ambient Temperature



On-state Terminal Current vs. Ambient Temperature

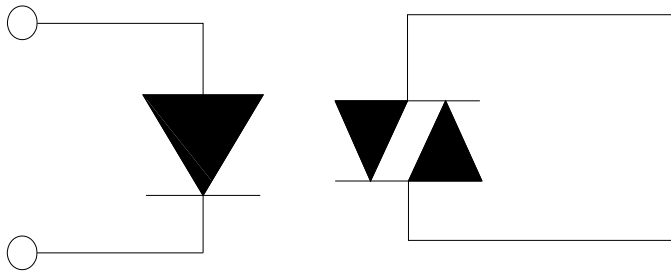
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Test Circuits of Turn On Time

Waveforms of Turn On Time

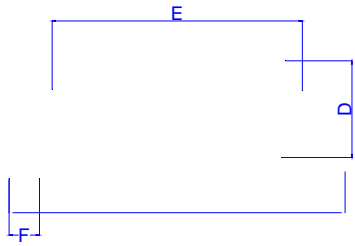
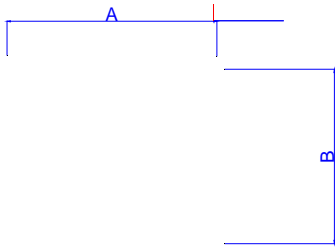


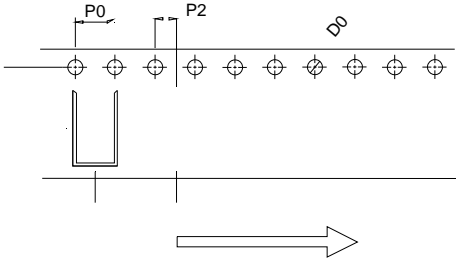


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Test circuit for inductive and resistive loads to IEC-61000-4-5 standards







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W

T

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D0

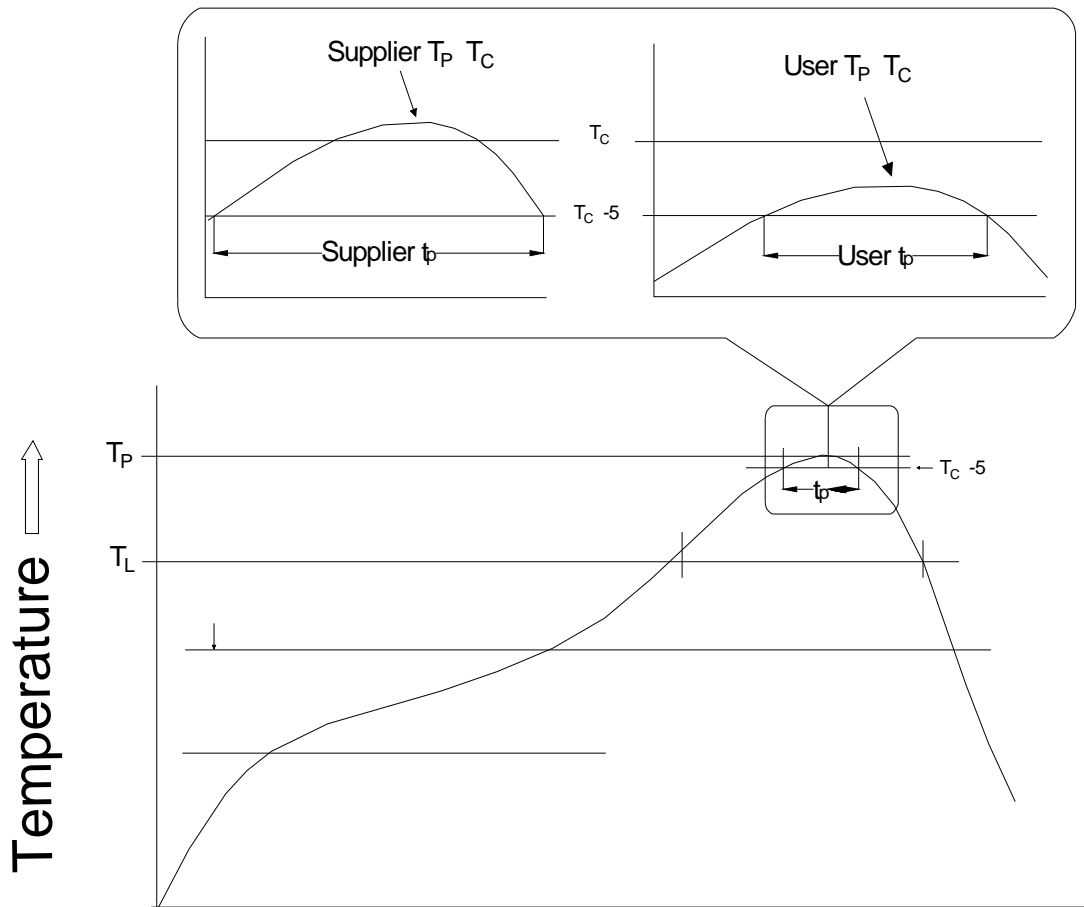
P0

P1

P2

W

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0						
P0						
P1						
P2						





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Note: