

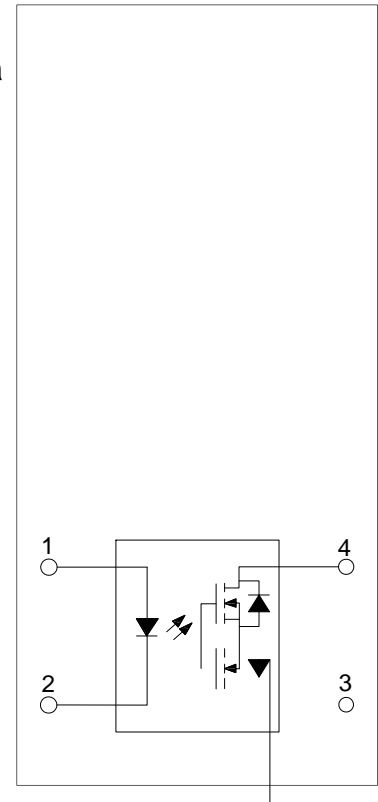


JOCMAXXC-M4 Series

Rev.A.1.0

DESCRIPTION:

The products are 4-pin optical relays. The device consists of an AlGaAs infrared emitting diode input stage optically coupled to a high-voltage output detector circuit in a plastic SOP4 package. The detector consists of a high-speed photovoltaic diode array and driver circuitry. The products are widely used in measuring and testing equipment, security and disaster prevention market, industrial machinery and equipment.



MAIN FEATURES

- High isolation 3750 Vrms
- Wide variation of load voltage 60V to 600V
- Operating temperature range -40°C to 110°C
- REACH & RoHS compliance
- HBM: H3A; MM: M4; CDM: C3
- CQC approved
- VDE approved
- UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1 ⁷	A
	Reverse Voltage	V_R	6	V
	Input Power Dissipation	P_D	75	mW
Output	Load Voltage	JOCMA39C	60	V
		JOCMA38C	60	
		JOCMA57C	100	
		JOCMA66C	200	
		JOCMA75C	400	
		JOCMA74C	400	
		JOCMA83C	600	
	Continuous load current	JOCMA39C	2	A
		JOCMA38C	1	
		JOCMA57C	0.5	
		JOCMA66C	0.3	
		JOCMA75C	0.18	

		JOCMA74C		0.1	
		JOCMA83C		0.05	
	Output Power Dissipation		P _O	300	mW
Total Power Dissipation			P _{tot}	375	mW
Isolation Voltage			V _{iso}	3750 ⁸	V _{rms}
Operating Temperature			T _{opr}	-40~110	
Junction Temperature			T _j	125	
Storage Temperature			T _{stg}	-55~125	
Soldering Temperature			T _{sol}	260	

NOTE1 111... • %00iµ ò, ì (0E < µ v Ç

NOTE2 (}0E íu]vµš U ZX, XA ðì• òì9

ELECTRICAL CHARACTERISTICS (Temperature=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V _F	I _F =10mA	-	1.2	1.5	V
	Reverse Current	I _R	V _R =6V	-	-	1	µA
	Action Current	I _{F(ON)}	I _L =I _{L(MAX)}	-	0.9	3	mA
	Reset Current	I _{F(OFF)}	I _L =I _{L(MAX)}	0.4	0.8	-	mA
Output	On Resistance	JOCMA39C	I _F =5mA I _L =Max. Within 1s on time	-	-	0.1	
		JOCMA38C		-	-	0.3	
		JOCMA57C		-	-	0.4	
		JOCMA66C		-	-	2.5	
		JOCMA75C		-	-	25	
		JOCMA74C		-	-	25	

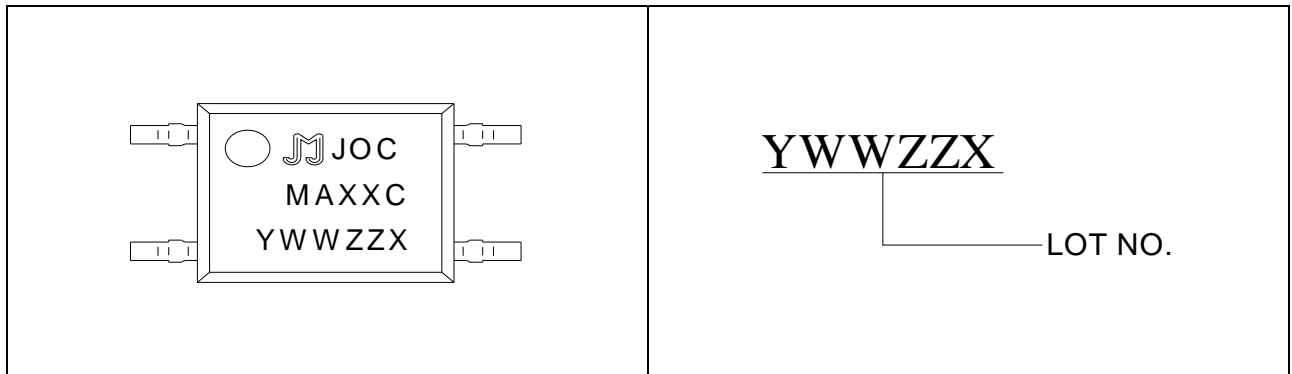
Turn Off Time	JOCMA3 C	t _{off}	I _F =5mA, I _L =Max.	-	0.08	0.2	ms
	JOCMA38C			-	0.08	0.2	
	JOCMA57C			-	0.08	0.2	
	JOCMA66C			-	0.04	0.2	
	JOCMA75C			-	0.04	0.2	
	JOCMA74C			-	0.04	0.2	
	JOCMA83C			-	0.04	0.2	

ORDERING INFORMATION

J	OC	M	A	3	8	C	-M4	/
JieJie Microelectronics Co., Ltd.	Opto Coupler	MOS	A:1NO 3:V _o 60V 5:V _o 100V 6:V _o 200V 7:V _o 400V 8:V _o 600V			I _{FT} 0.3mA 9:I _o :2A 8:I _o :1A 7:I _o :0.5A 6:I _o :0.3A 5:I _o :0.18A 4:I _o :0.1A 3:I _o :0.05A	SOP4	None:T1 R:T2

Packing Quantity	
Option	Quantity
E } v IZ	ïïïï h v]š • IZ o

MARKING



Characteristics Curves

FIG.1: LED Dropout Voltage vs. Ambient Temperature

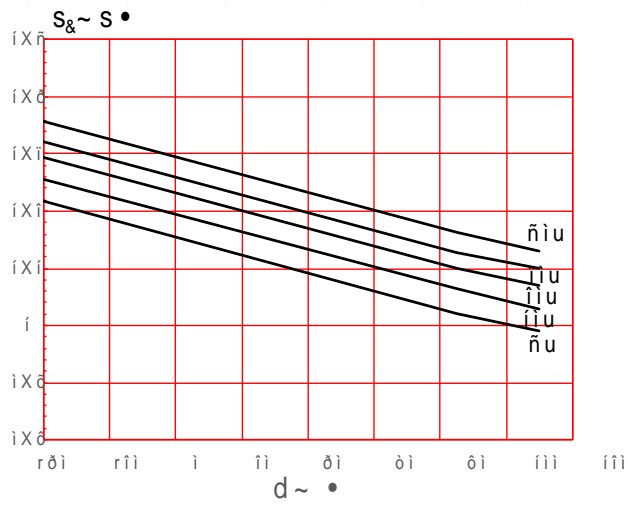


FIG.3: On Resistance vs. Ambient Temperature

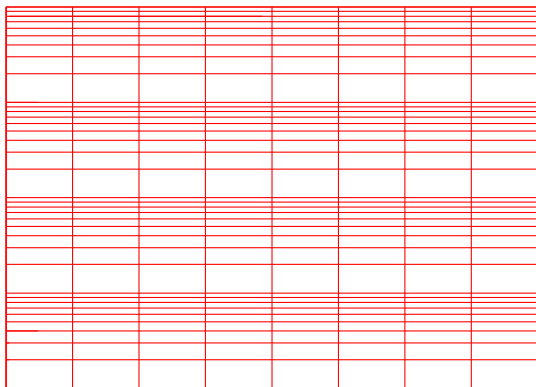


FIG.2: Output Current vs. Output Voltage

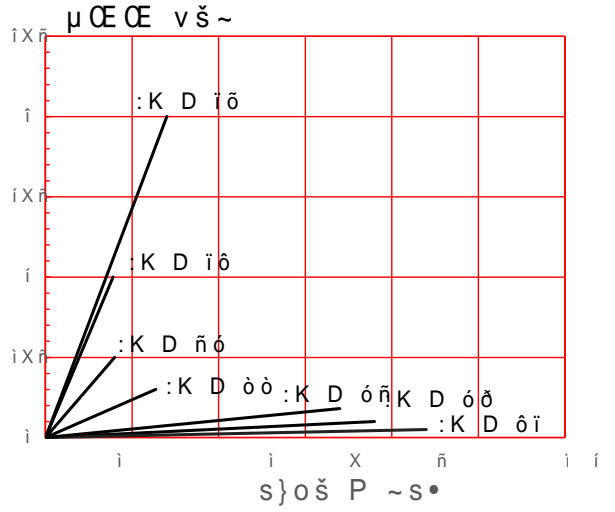
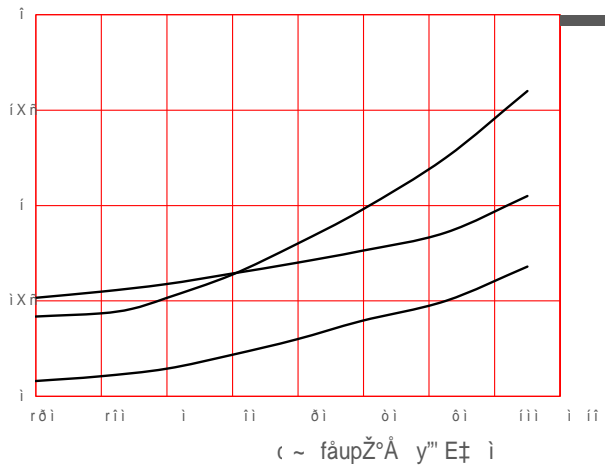


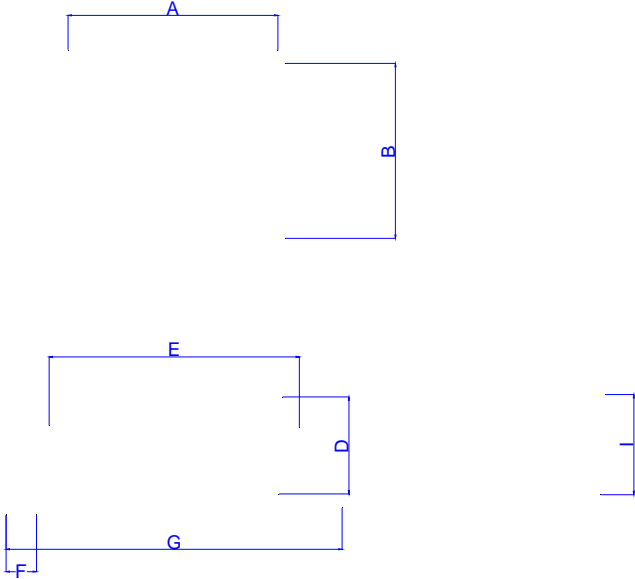
FIG.4: Load Current vs. Ambient Temperature

FIG.7: Turn On Time vs. Ambient Temperature

FIG.8: Turn Off Time vs. Ambient Temperature

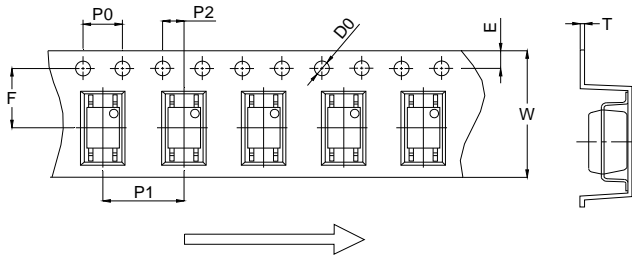


Package Dimension (Unit: mm)



CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

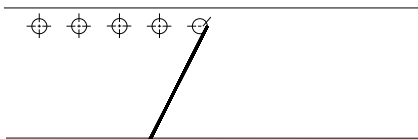
Option None



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50	1.60		0.059	0.063
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	7.90	8.00	8.10	0.311	0.315	0.319
P2	1.90	2.00	2.10	0.075	0.079	0.083
E	1.65	1.75	1.85	0.065	0.069	0.073
F	4.40	4.50	4.60	0.173	0.177	0.181
T	0.25	0.30	0.35	0.010	0.012	0.014
W	11.90	12.00	12.30	0.469	0.472	0.484

Option R

. . P O - -



Note:

1. Reflow soldering is recommended at the temperatures and times shown, no more than three times.
2. Avoid direct contact between the epoxy body and any tools or surfaces exceeding its maximum