JOCMC35C-D6P/S Series

Rev.A.1.0

DESCRIPTION:

The products are 6-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 DIP6 package with different lead forming options. 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
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)

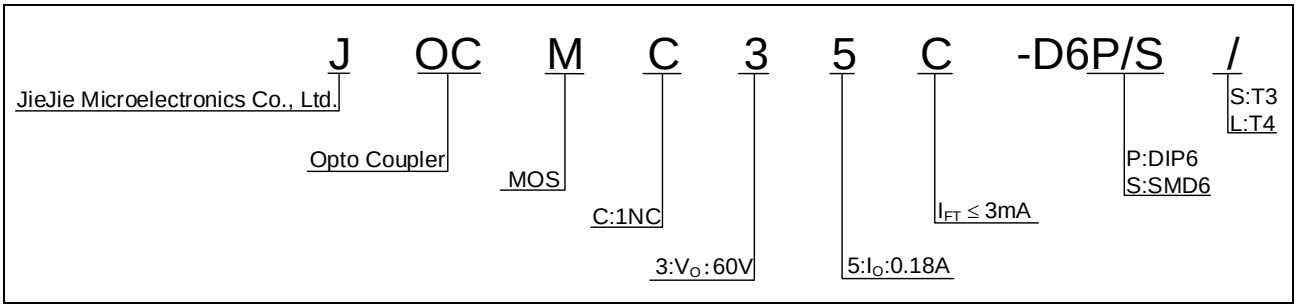
Parameter		Symbol	Value	Unit
	Forward Current	I_F	50	mA

NOTE1: 100μs pulse, 100Hz frequency
NOTE2: AC for 1minute, R.H.=40~60%

ELECTRICAL CHARACTERISTICS (Temperature=25°C)

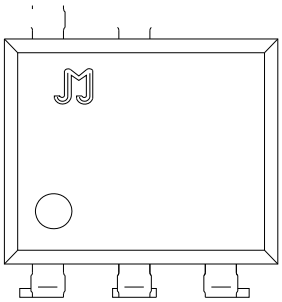
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V_F	I_F=10mA	-	1.2	1.5	V
	Reverse Current	I_R	V_R=6V	-	-	1	μA
	Action Current	$I_{F(ON)}$	I_L=$I_{L(MAX)}$	-	0.9	3	mA
	Reset Current	$I_{F(OFF)}$	I_L=$I_{L(MAX)}$	0.4	0.8	-	mA
Output	On Resistance	R_{on}	I_F=5mA I_L=Max. Within 1s on time	-	-	8	Ω
	Off State Leakage Current	I_{Leak}	I_F=0mA, V_L=Max.	-	-	1	μA
Switching Characteristics	Isolation Resistance	R_{ISO}	DC500V 40~60%R.H.	10^{12}	-	-	Ω
	Floating Capacitance	C_{IO}	V=0, f=1MHz	-	-	1.5	pF
	Turn On Time	t_{on}	I_F=5mA, I_L=Max.	-	0.65	2	ms
	Turn Off Time	t_{off}	I_F=5mA, I_L=Max.	-	0.08	0.2	ms

ORDERING INFORMATION



Packing Quantity	
Option	**Quantity**
DIP	60 Units/Tube
SMD	1200 Units/Reel

MARKING



Characteristics Curves

FIG.1: LED Dropout Voltage vs. Ambient Temperature

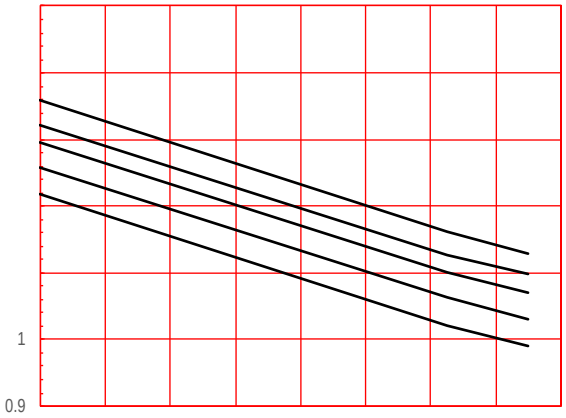


FIG.2: Output Current vs. Output Voltage

FIG.7: Turn On Time vs. Ambient Temperature

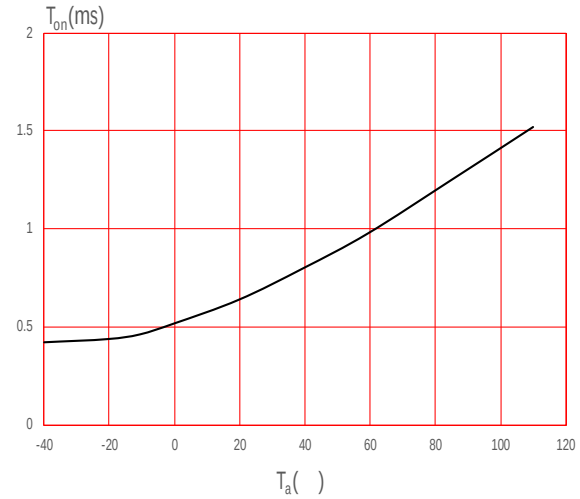


FIG.8: Turn Off Time vs. Ambient Temperature

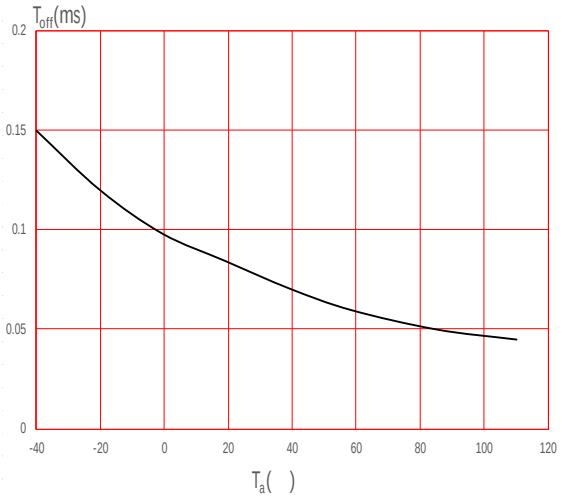


FIG.9: Turn On Time vs. LED Forward Current

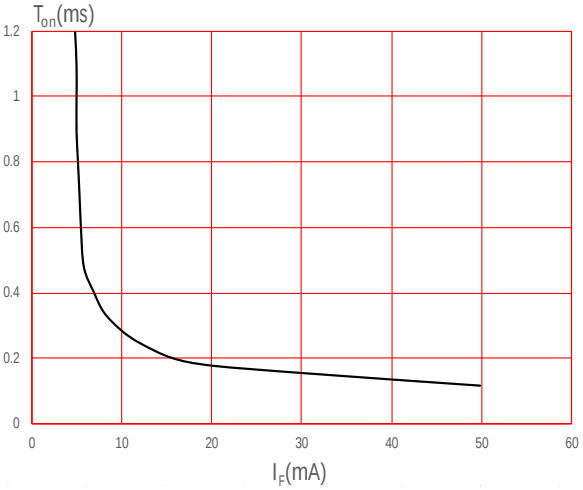


FIG.10: Turn Off Time vs. LED Forward Current

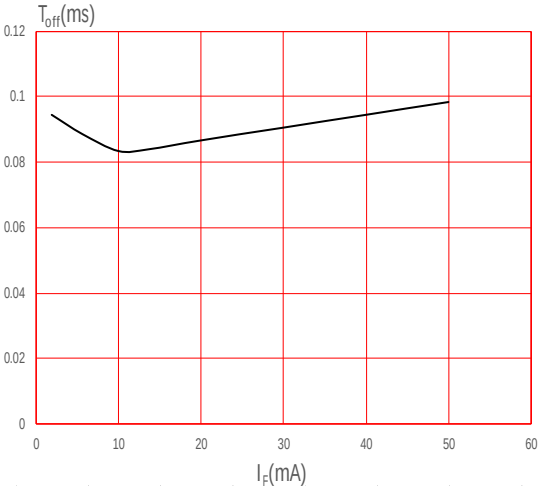


FIG.11: Off State Leakage Current vs. Load Voltage

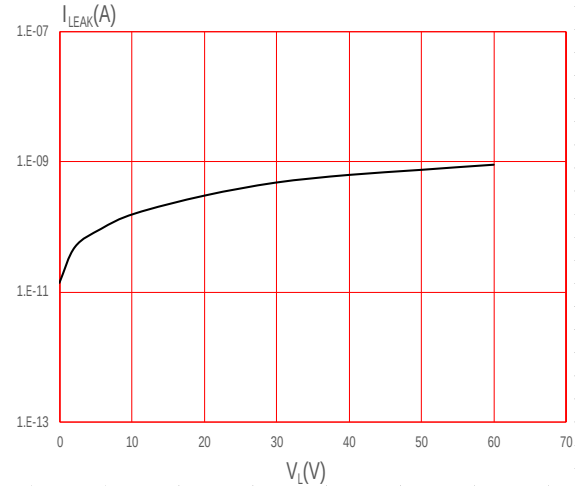
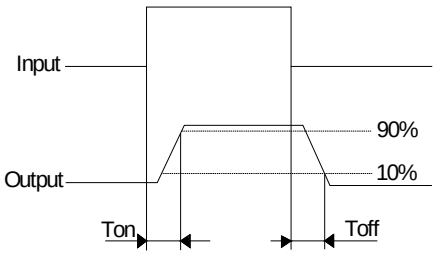
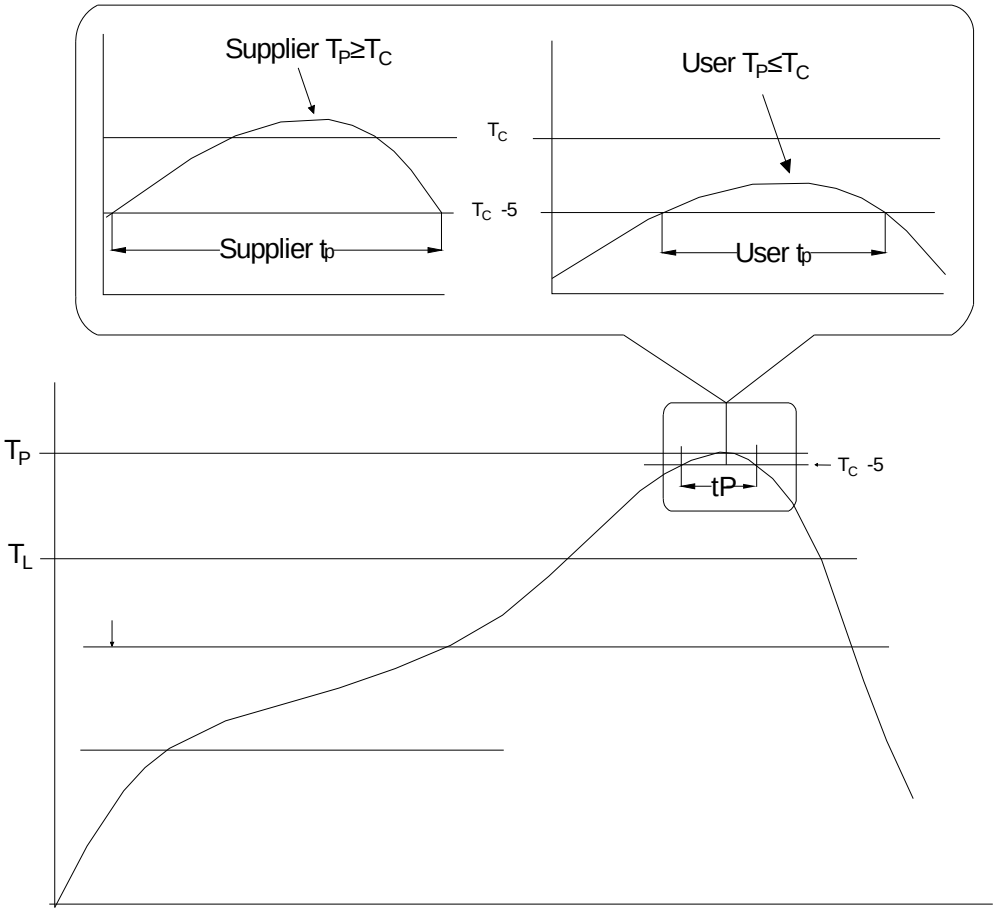


Fig.12: Turn on/Turn off time

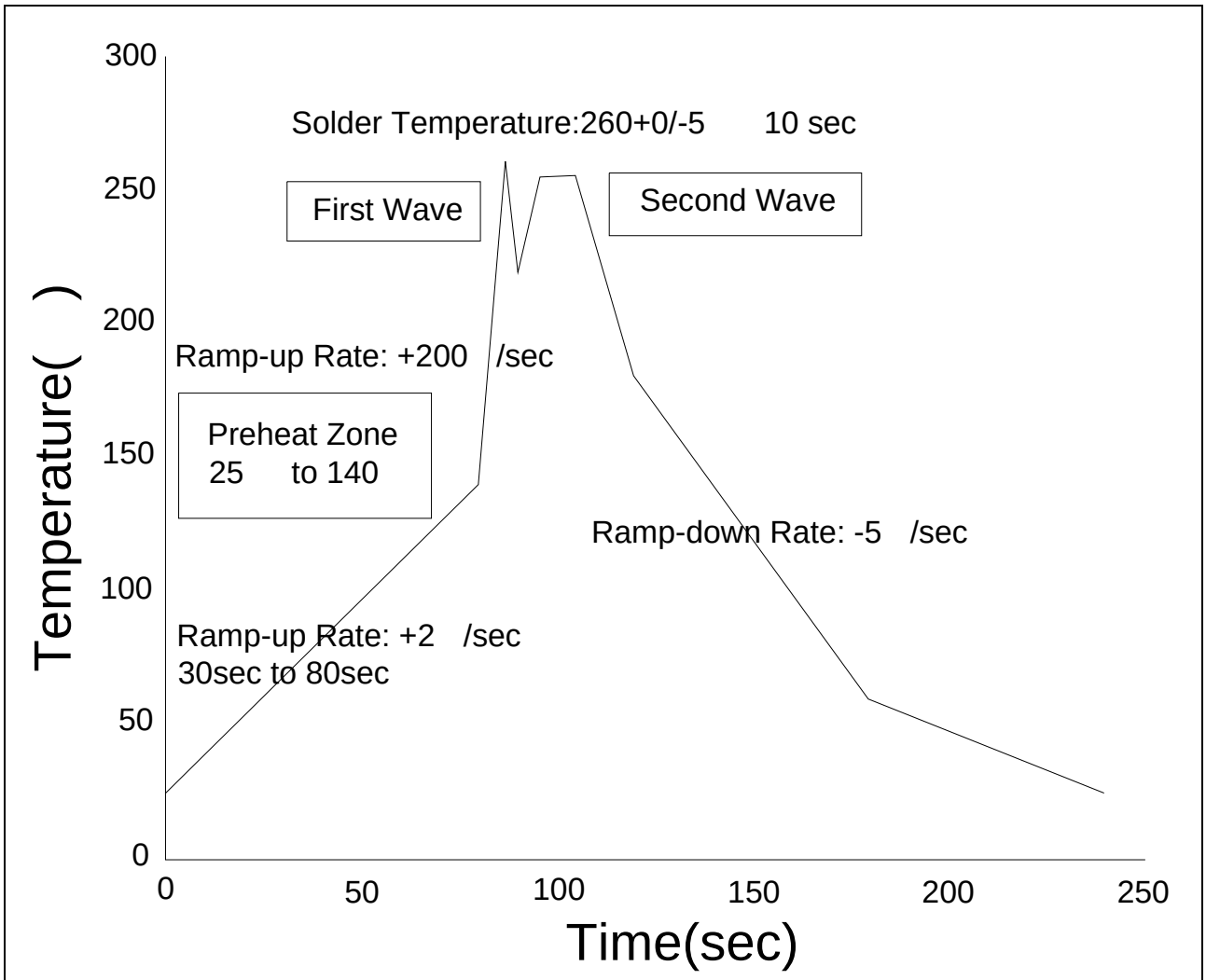


JOCMC35C

REFLOW INFORMATION



WAVE SOLDERING



HAND SOLDERING BY SOLDERING IRON	
Soldering Temperature	360 ± 5
Soldering Time	3s max.

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 storage temperature.

3. Application of pressure on the epoxy body is prohibited at elevated temperatures. In specific scenarios, any applied force must not exceed 2.5N.

4. Ensure the component has cooled to ambient temperature before proceeding with any subsequent manufacturing steps.

5. The component has a shelf life of one year when stored under standard conditions.

6. Recommend storage Temp.: 0~40°C;

Recommend storage humidity: <60%;

MSL level: MSL 1