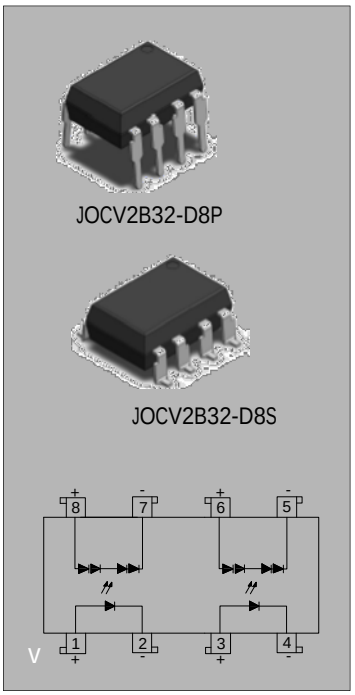
JOCV2B32-D8P/S Series

Rev.A.1.0

The products are voltage opto-couplers in a plastic DIP8 package with different lead forming options. The device consists of a high-voltage output detector circuit.It is capable of directly driving gates of power MOSFETs or IGBTs. The products are widely used in supply for electronic circuit and drive solid state relay.



High isolation 5000 VRMS
Operating temperature range -40°C to 110°C
RoHS & REACH Compliance
HBM: H3A; MM: M4; CDM: C3
CQC approved
VDE approved
UL approved

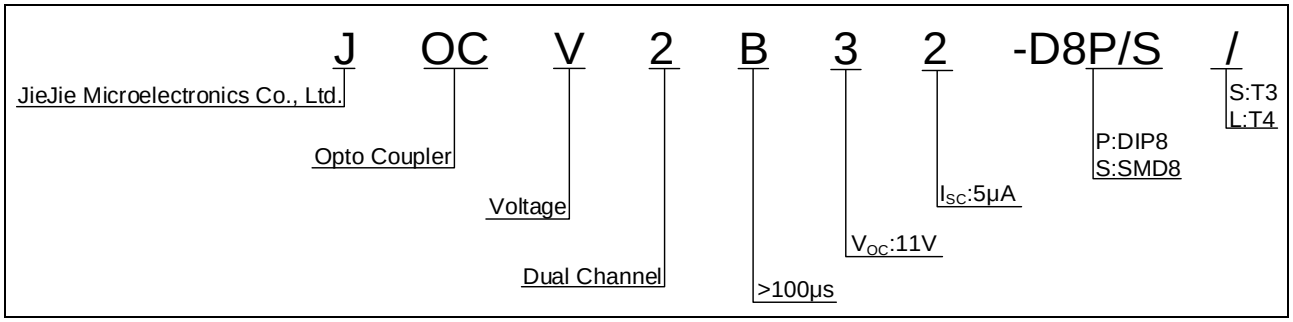
(Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1	A
	Reverse Voltage	V_R	6	V
	Power Dissipation	P_D	75	mW
Isolation Voltage		V_{iso}	5000	Vrms
Operating Temperature		T_{opr}	-40~+110	
Junction Temperature		T_j	125	
Storage Temperature		T_{stg}	-55~+125	
Soldering Temperature		T_{sol}	260	

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

(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
Output	Open Circuit Voltage	V_{OC}	I_F=10mA I_O=0mA	11	-	-	V
	Short Circuit Current	I_{SC}	I_F=10mA V_O=0V	5	-	-	μA
Transfer Characteristics	Isolation resistance	R_{IO}	DC500V 40~60%R.H.	10^{12}	-	-	Ω
	Response Time	t_{on}	I_F=10mA	-	100	-	μs
		t_{off}		-	50	-	μs



DIP	50 Units/Tube	40 Tubes/Inner box	5 Inner box/Outer box =10k Units
SMD	1200 Units/Reel	2 Reels/Inner box	5 Inner box/Outer box =12k Units

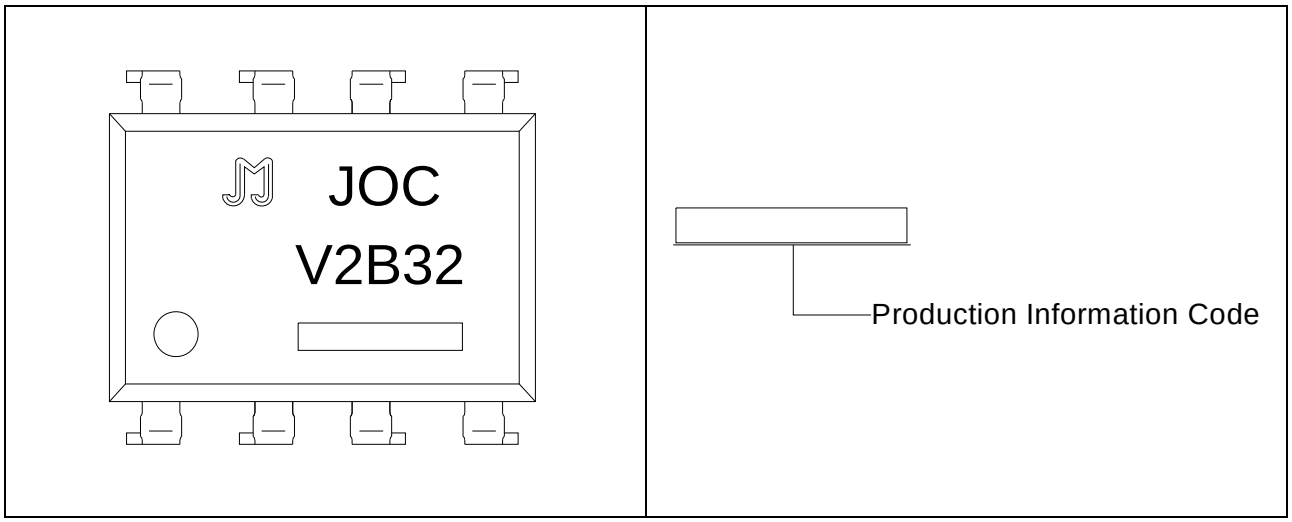


FIG.1: Max. Allowable LED Forward Current vs. Ambient Temperature

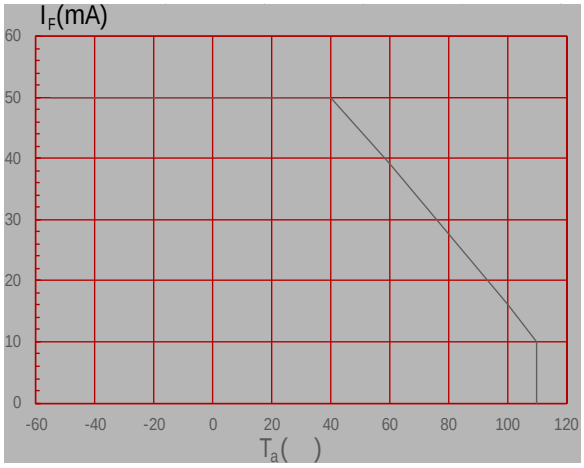


FIG.2: Forward Current vs. Forward Voltage

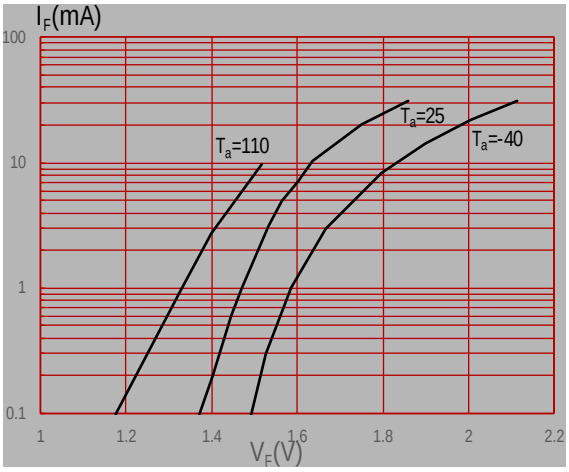


FIG.3: Open Circuit Voltage vs. Forward Current

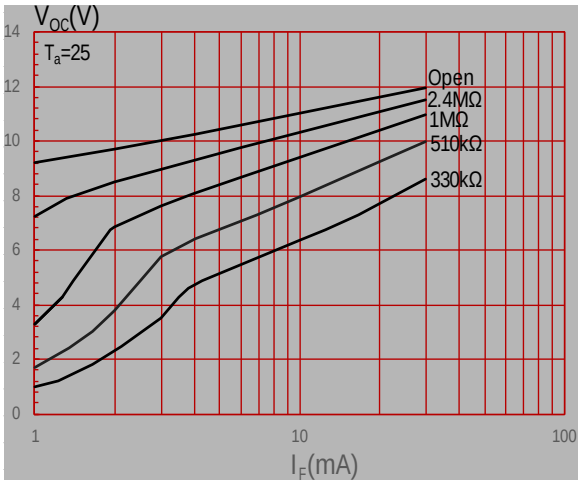


FIG.4: Short Circuit Current vs. Forward Current

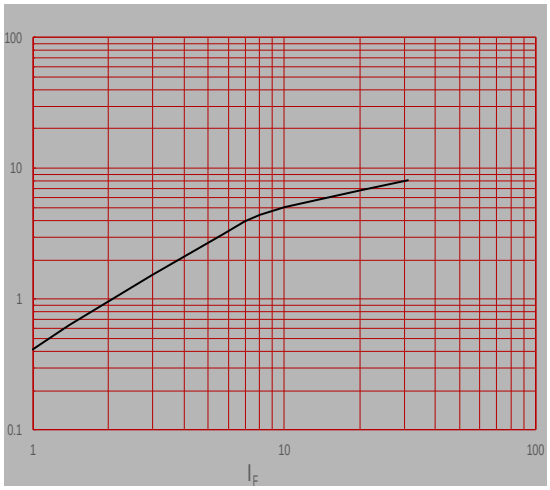
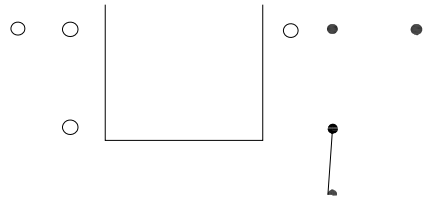
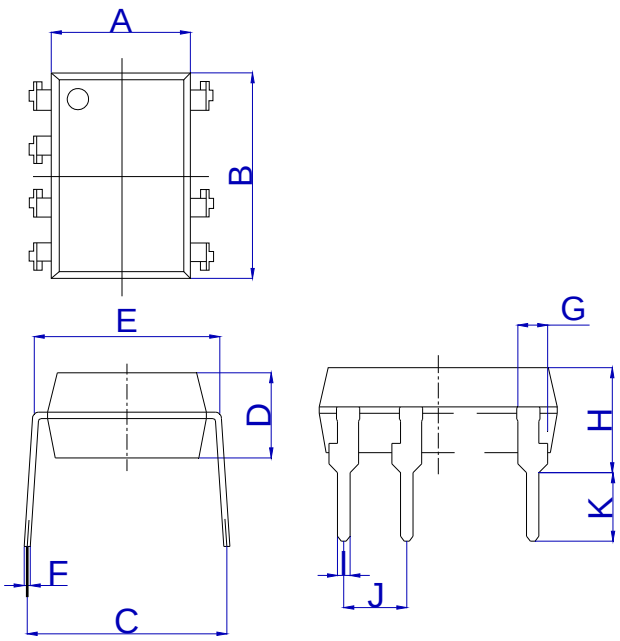


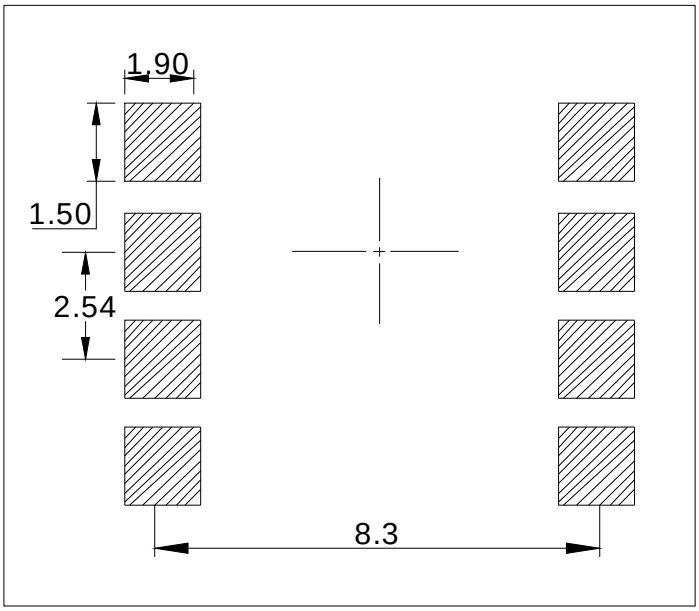
FIG.7: Response Time Test Circuit, Waveform



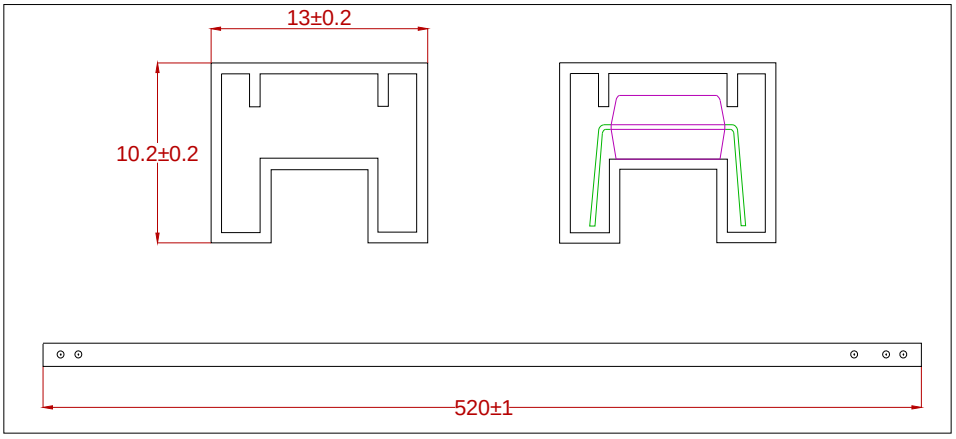
Standard DIP Type:



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	6.20		6.60	0.244		0.260
B	9.40		9.80	0.370		0.386
C	7.15		8.95	0.281		0.352
D	3.20		3.60	0.126		0.142
E	7.32		7.92	0.288		0.312
F	0.15		0.35	0.006		0.014
G	0.90		1.50	0.035		0.059
H	3.90		4.50	0.154		0.177
I	0.40		0.60	0.016		0.024
J	2.29		2.79	0.090		0.110
K	2.24		3.24			

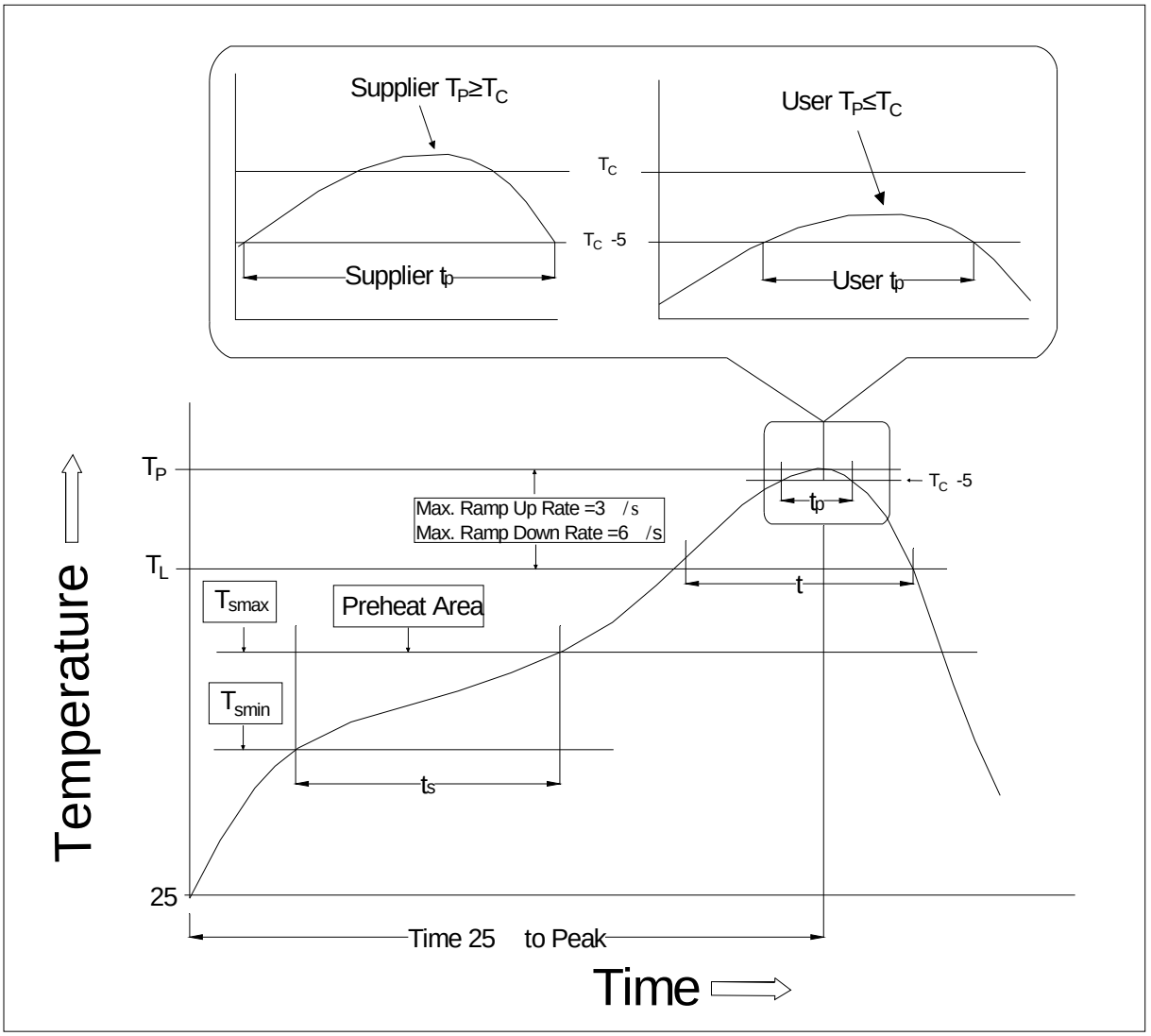


Standard DIP

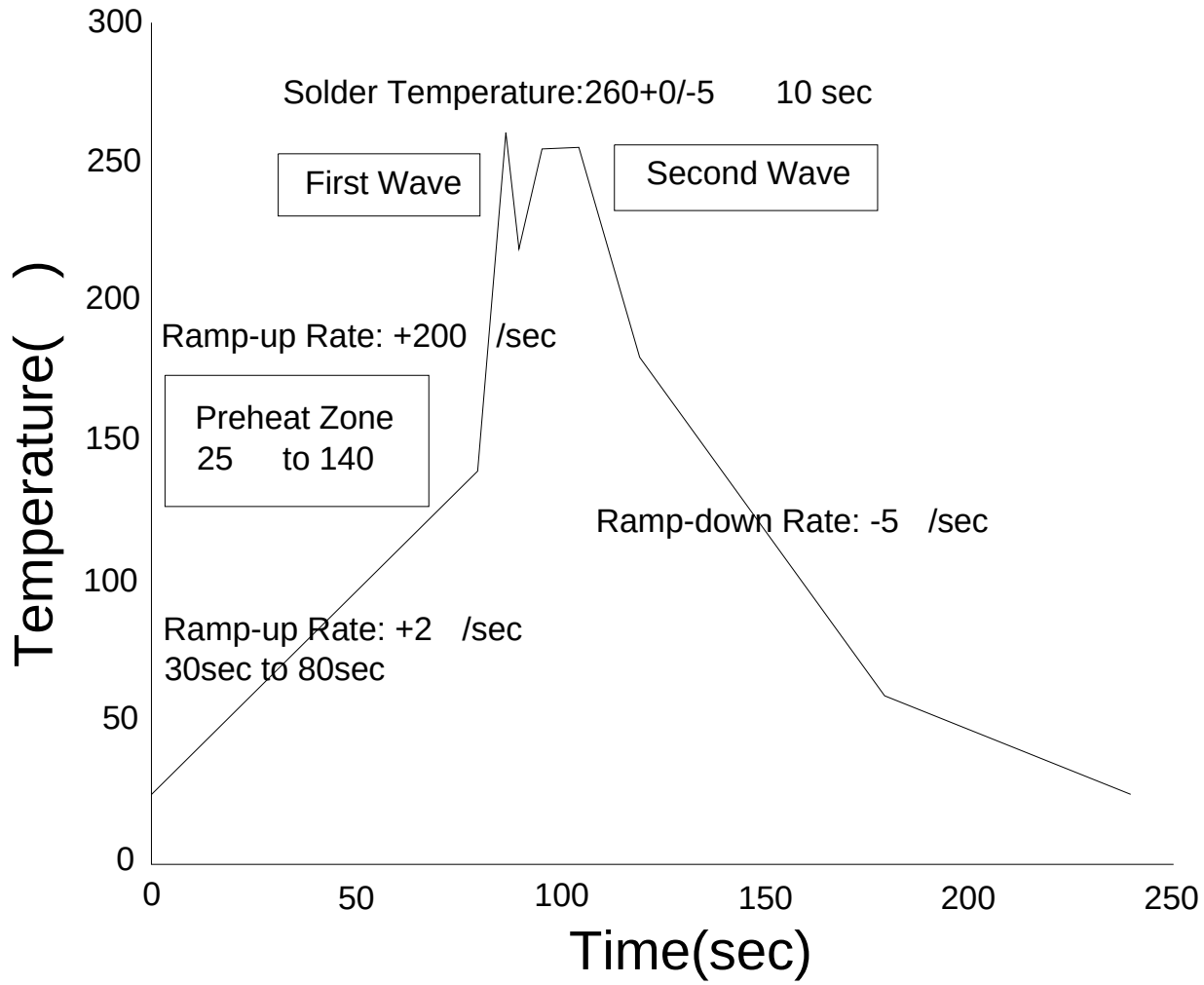


Option S

Dimensions					
Ref.	Millimeters			Inches	
	Min.	Typ.	Max.	Min.	



Profile Feature	Sn-Pb Assembly Profile	Pb-Free Assembly Profile
Temperature Min. (Tsmin)	100	150
Temperature Max. (Tsmax)	150	200
Time (ts) from (Tsmin to Tsmax)	60-120 seconds	60-120 seconds
Ramp-up Rate (tL to tP)	3 /second max.	3 /second max.
Liquidus Temperature (TL)	183	217
Time (tL) Maintained Above (TL)	60-150 seconds	60-150 seconds
Peak Body Package Temperature	235 +0 /-5	260 +0 /-5
Time (tP) within 5 of 260	10 seconds	10 seconds
Ramp-down Rate (TP to TL)	3-6 /second	3-6 /second
Time 25 to Peak Temperature	6 minutes max.	8 minutes max.



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