## JOCDA3ABN-W8

(Temperature=25°C)

| Parameter | | Symbol | Value | Unit |
|---|---|---|---|---|
| LED | Forward Current | $I_F$ | 50 | mA |
| | Peak Forward Current | $I_{FP}$ | 1 | A |
| | Reverse Voltage | $V_R$ | 6 | V |
| | Power Dissipation | $P_D$ | 100 | mW |
| Detector | Output Voltage | $V_O$ | 35 | V |
| | Supply Voltage | $V_{CC}$ | 35 | V |
| | Power Dissipation | $P_C$ | 400 | mW |
| Isolation Voltage | | $V_{iso}$ | 7500 | Vrms |
| Operating Temperature | | $T_{opr}$ | -40~110 | |
| Junction Temperature | | $T_j$ | 125 | |
| Storage Temperature | | $T_{stg}$ | -55~125 | |
| Total Power Dissipation | | $P_{tot}$ | 500 | mW |
| Soldering Temperature | | $T_{sol}$ | 260 | |

: 100μs pulse, 100Hz frequency

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Low Level Output Voltage | $V_{OL}$ | $I_O$=100mA | - | 0.2 | 0.5 | V |
| | Threshold Input Current | $I_{FLH}$ | $V_O$ 5V | - | 1.2 | 5 | mA |
| | Threshold Input Voltage | $V_{FHL}$ | $V_O$ 5V | 0.8 | - | - | V |
| | Supply Voltage | $V_{CC}$ | - | 15 | - | 30 | V |
| | UVLO Threshold | VUVLO+ | $V_O$ 5V, $I_F$=10mA | 12.1 | 12.8 | 13.5 | V |
| | | VUVLO- | $V_O$ 5V, $I_F$=10mA | 11.1 | 11.8 | 12.4 | V |

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Propagation Delay Time to High Output Level | $t_{PLH}$ | $R_g$=10Ω, $C_g$=25nF, f=20kHz, Duty Cycle=50%, $I_F$=7mA, $V_{CC}$=30V | 30 | - | 500 | ns |
| Propagation Delay Time to Low Output Level | $t_{PHL}$ | | 30 | - | 500 | |
| Propagation Delay Difference Between Any Two Parts | $t_{PHL}$- $t_{PLH}$ | | - | - | 350 | |
| Output Rise Time (10 to 90%) | $t_r$ | $R_g$=10Ω, $C_g$=25nF, $I_F$=0→7mA, $V_{CC}$=30V | - | 50 | - | |
| Output Fall Time (90 to 10%) | $t_f$ | $R_g$=10Ω, $C_g$=25nF, $I_F$=7→0mA, $V_{CC}$=30V | - | 50 | - | |
| Common Mode Transient Immunity at High Level Output | $\|CM_H\|$ | $I_F$=7mA $V_{CC}$=30V, $T_a$=25 , $V_O$(min)=26V $V_{CM}$=1500Vpp | ±35 | - | - | kV/μs |
| Common Mode Transient Immunity at Low Level Output | $\|CM_L\|$ | $I_F$=0mA $V_{CC}$=30V, $T_a$=25 , $V_O$(max)=1V $V_{CM}$=1500Vpp | ±35 | - | - | kV/μs |

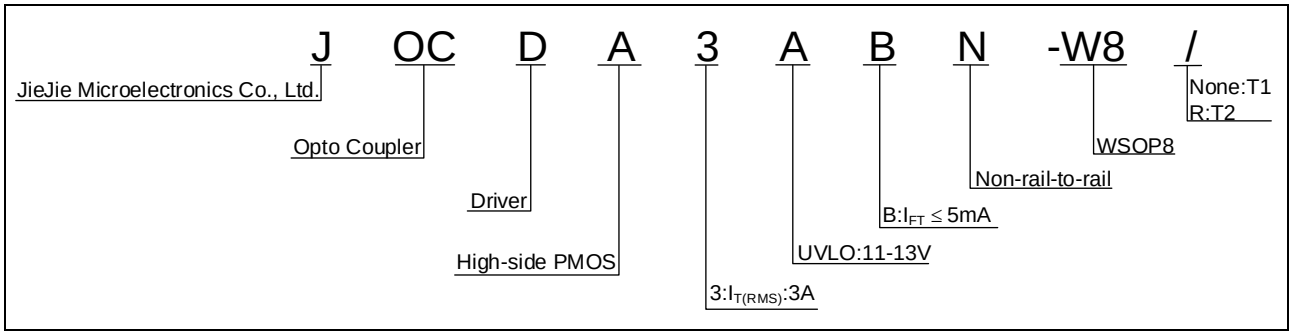
All Typical values at $T_a$=25

: Input signal (f=25kHz,duty=50%, tr=tf=5ns or less). $C_L$ is less than 15 pF which includes probe and stray wiring capacitance.

: $CM_H$ is the maximum rate of fall of the common mode voltage that can be sustained with the output voltage in the logic high state (VO 26V).

: CML is the maximum rate of rise of the common mode voltage that can be sustained with the output voltage in the logic low state (VO 1V).

# JOCDA3ABN




| | | | |
|---|---|---|---|
| WSOP8 | 1200 Units/Reel | 1 Reel/Inner box | 5 Inner box/Outer box =6k Units |

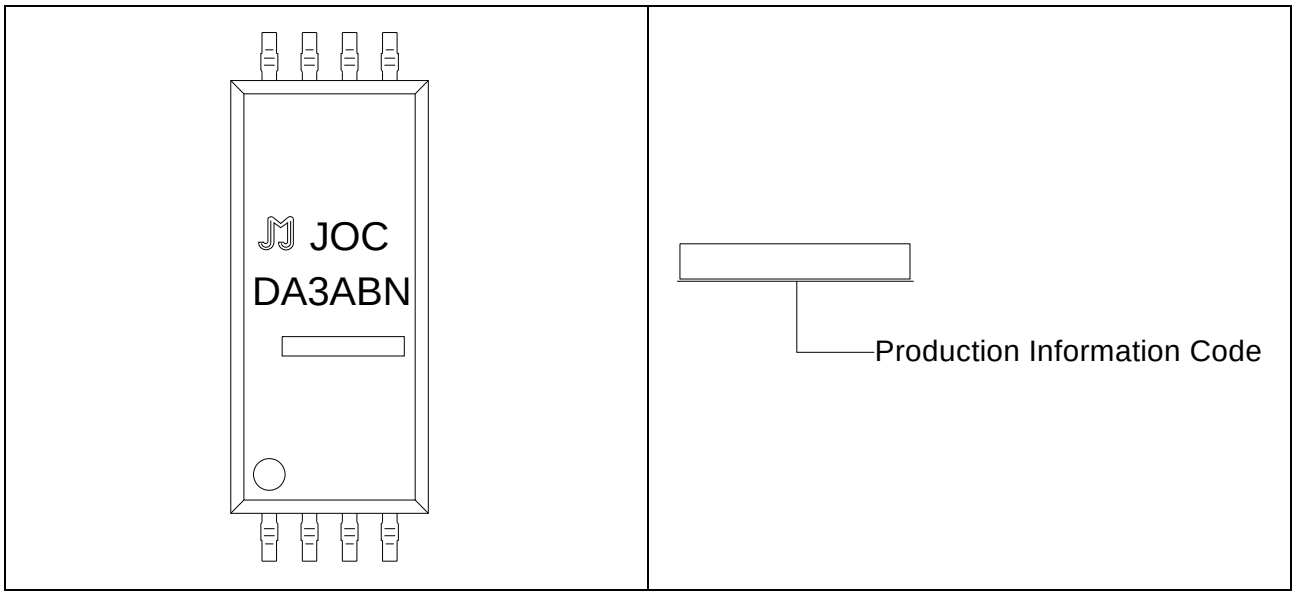


**FIG.1:** Forward Current vs. Forward Voltage

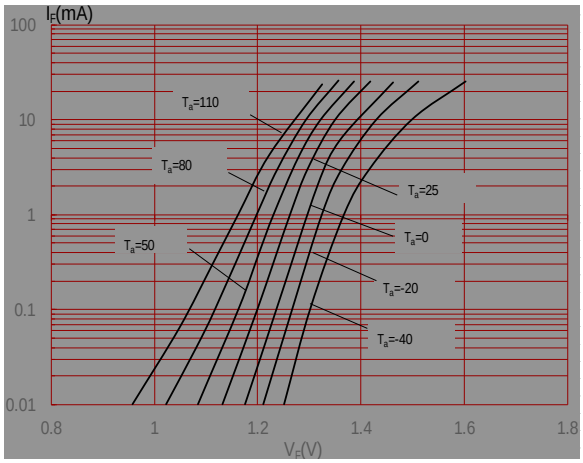



**FIG.2:** Max. Allowable LED Forward Current vs. Ambient Temperature

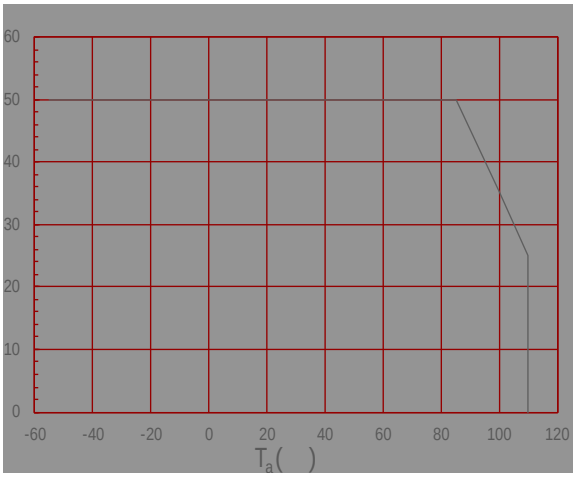
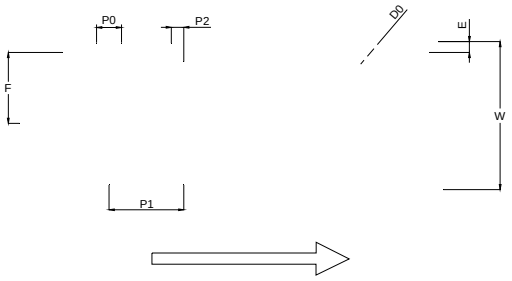


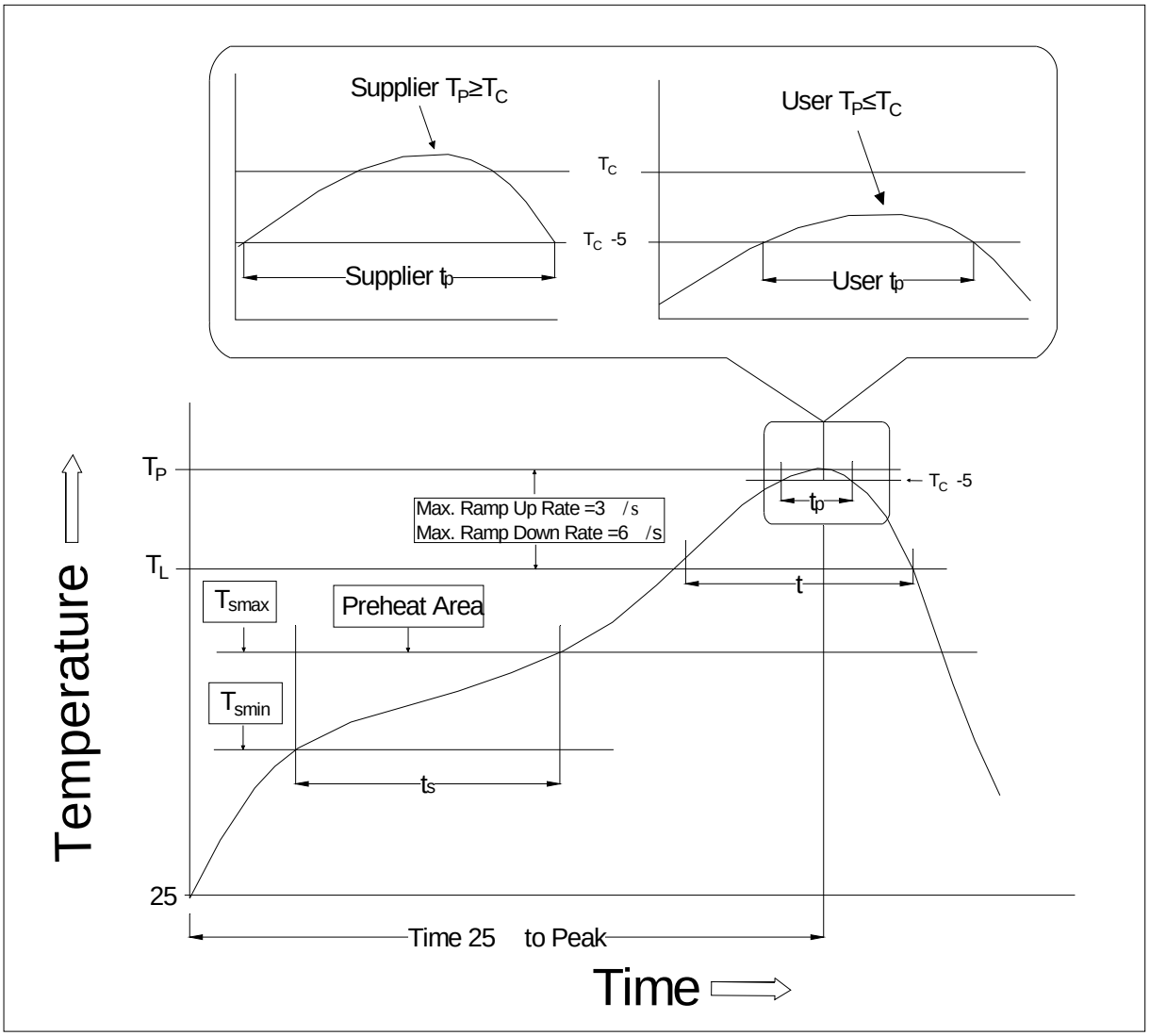
**FIG.7:** Low-level Output Voltage vs. Ambient Temperature

**FIG.8:** High-level Output Voltage vs. Ambient Temperature

**FIG.13:** Propagation Delay Time vs. Supply Voltage

# JOCDA3ABN


P0
P2
D0
E
F
W
P1




| 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. |

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%;

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