

# 300mA,75V Switching Diode Array

#### **Features**

- Fast Switching Speed
- For General Purpose Switching Applications
- Halogen-free、RoHS Compliant
- Ultra-Small Surface Mount Package

### Mechanical Data

- SOT-363 Package Type: SOT-363
- Epoxy UL: 94V-0
- Mounting Position: Any

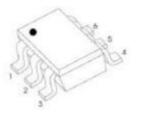




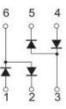
Marking: KJG

SOT-363

Pin definition



#### Epuivalent circuit



| Maximum Ratings & Electrical Characteristics(TA=25°C unless otherwise noted) |                  |            |      |  |  |
|--|------------------|------------|------|--|--|
| Parameter  | Symbol           | Value      | Unit |  |  |
| DC Blocking Voltage  | V <sub>R</sub>   |            |      |  |  |
| Working Peak Reverse Voltage   | Vrwm             | 75         | V    |  |  |
| Repetitive Peak Reverse Voltage  | V <sub>RRM</sub> |            |      |  |  |
| Non-repetitive pak frward crrent   | I <sub>FM</sub>  | 300        | m A  |  |  |
| Power Dissipation  | P <sub>D</sub>   | 200        | mW   |  |  |
| Average Rectified Current  | lo               | 150        | mA   |  |  |
| Non-Repetitive Peak Forward Surge Current<br>@ t=8.3ms                       | I <sub>FSM</sub> | 2.0        | А    |  |  |
| Junction and Storage Temperature   | $T_J T_{STG}$    | -55 to+150 | °C   |  |  |
| Thermal Resistance from Junction to Ambient                                  | Reja             | 625        | °C/W |  |  |

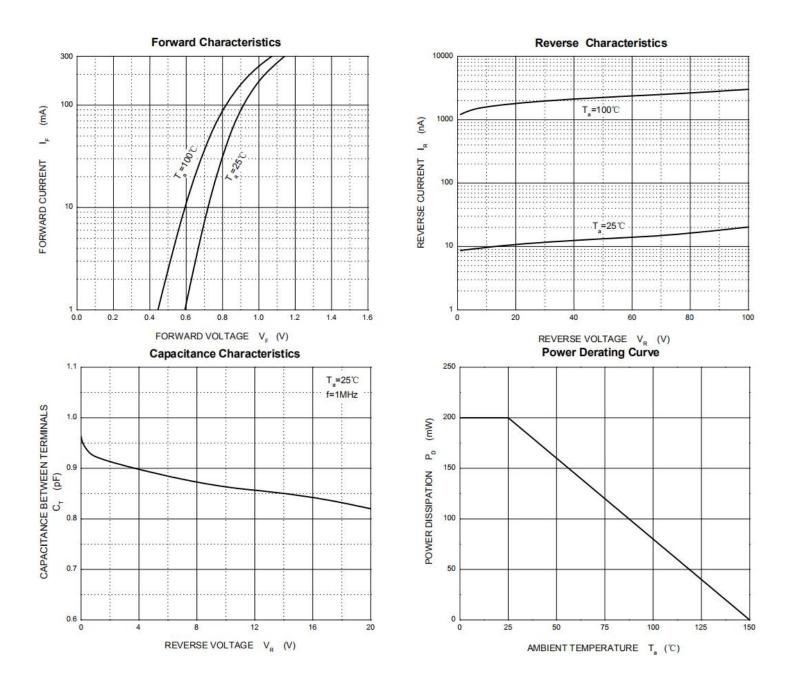
| Electrical Specifications(TA=25°C unless otherwise noted) |                |  |     |     |       |      |
|---|----------------|--|-----|-----|-------|------|
| Parameter   | Symbol         | Test Conditions  | Min | Тур | Max   | Unit |
| Reverse Voltage   | V <sub>R</sub> | IR=2.5uA   | 75  |     |       | V    |
| Forward Voltage   | V <sub>F</sub> | IF=1mA   |     |     | 0.715 | v    |
|   |                | IF=10mA  |     |     | 0.855 |      |
|   |                | IF=50mA  |     |     | 1     |      |
|   |                | IF=150mA   |     |     | 1.25  |      |
| Reverse Leakage Current I <sub>R</sub>                    |                | VR=75V   |     |     | 2.5   | uA   |
|   | VR=20V         |  |     | 25  | nA    |      |
| Typical junction capacitance                              | CJ             | VR=0V, f=1MHZ  |     |     | 2     | pF   |
| Reverse Recovery Time                                     | Trr            | $I_{F}=I_{R}=10\text{mA},$<br>$I_{rr}=0.1\times I_{R},$<br>$R_{L}=100\Omega$ |     |     | 4     | nS   |



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#### **Ratings and Characteristics Curves**

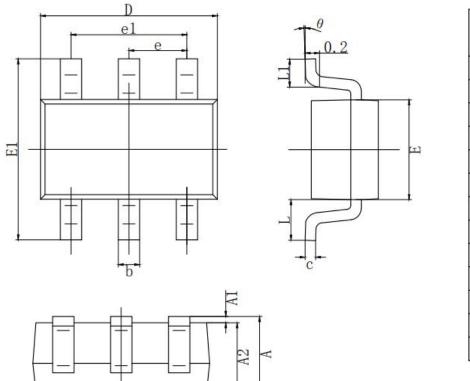
(TA = 25°C unless otherwise noted)





## Package Outline Dimensions

in inches (millimeters)



|        | MILLIMETER |        |  |
|--------|------------|--------|--|
| SYMBOL | MIN        | MAX    |  |
| A      | 0.900      | 1.100  |  |
| A1     | 0.000      | 0. 100 |  |
| A2     | 0.900      | 1.000  |  |
| b      | 0.150 0.35 |        |  |
| С      | 0.080      | 0.150  |  |
| D      | 2.000      | 2. 200 |  |
| E      | 1.150      | 1.350  |  |
| E1     | 2.150      | 2.450  |  |
| е      | 0.650 TYP. |        |  |
| el     | 1.200      | 1. 400 |  |
| L      | 0.525 REF. |        |  |
| L1     | 0.260      | 0.460  |  |
| 0      | 0°         | 8°     |  |

### **Revision History**

| Document Version | Date of release | Description of changes |
|------------------|-----------------|------------------------|
| Rev.A            | 2019.07.09      | First issue            |
|                  |                 |                        |
|                  |                 |                        |



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