

**Surface Mount Schottky Barrier Diodes**

**RB731XN**

**FEATURES**

- Small power mold type.
- Low VF.
- High reliability.



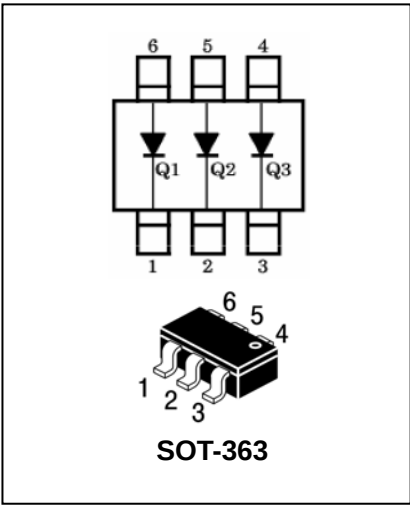
Lead-free

**APPLICATIONS**

- Ultra high speed switching.

**ORDERING INFORMATION**

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| RB731XN  | 731     | SOT-363      |



**MAXIMUM RATING @ Ta=25℃ unless otherwise specified**

| Symbol         | Characteristic                            | Value       | Unit |
|----------------|-------------------------------------------|-------------|------|
| $V_{RM}$       | Maximum peak reverse Voltage              | 40          | V    |
| $V_R$          | DC reverse Voltage                        | 40          | V    |
| $I_O$          | Average forward output current            | 30          | mA   |
| $I_{FSM}$      | Non-Repetitive peak forward surge current | 0.2         | A    |
| $P_D$          | Power Dissipation                         | 200         | mW   |
| $T_j, T_{stg}$ | Junction and Storage Temperature          | -40 to +125 | ℃    |

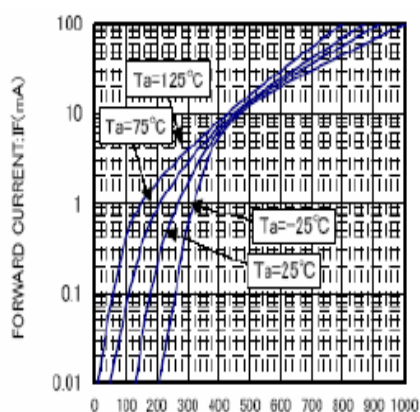
## Surface Mount Schottky Barrier Diodes

## RB731XN

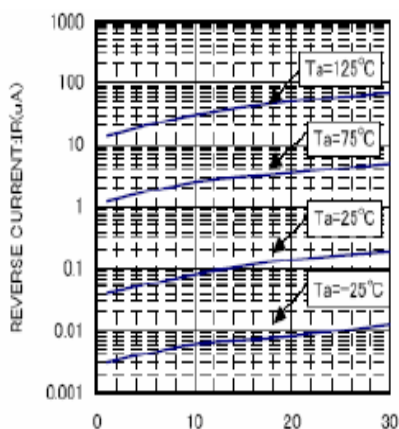
### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter                 | Symbol      | Test conditions      | MIN | MAX  | UNIT    |
|---------------------------|-------------|----------------------|-----|------|---------|
| Reverse breakdown voltage | $V_{(BR)R}$ | $I_R=100\mu A$       | 40  | -    | V       |
| Average reverse current   | $I_R$       | $V_R=10V$            |     | 1    | $\mu A$ |
| Forward voltage           | $V_F$       | $I_F=1mA$            | -   | 0.37 | V       |
| Total Capacitance         | $C_T$       | $V_R=1.0V, f=1.0MHz$ | -   | 2    | pF      |

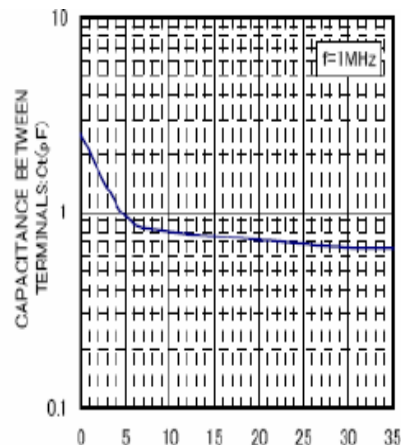
### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



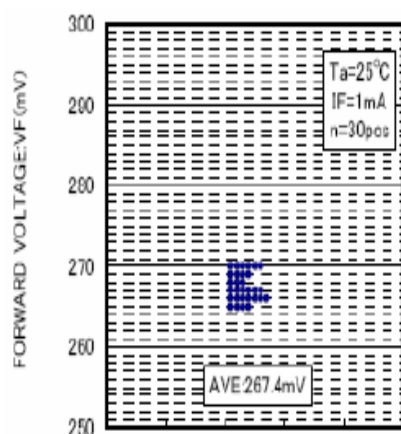
FORWARD VOLTAGE:  $V_F$ (mV)  
VF-IF CHARACTERISTICS



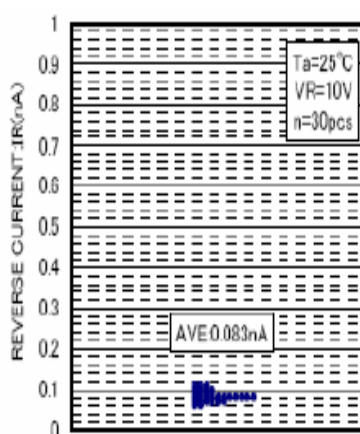
REVERSE VOLTAGE:  $V_R$ (V)  
VR-IR CHARACTERISTICS



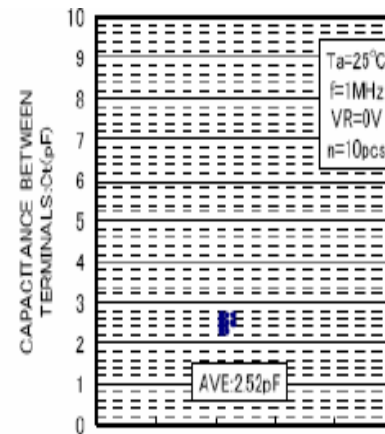
REVERSE VOLTAGE:  $V_R$ (V)  
VR-Ct CHARACTERISTICS



VF DISPERSION MAP



IR DISPERSION MAP



Ct DISPERSION MAP

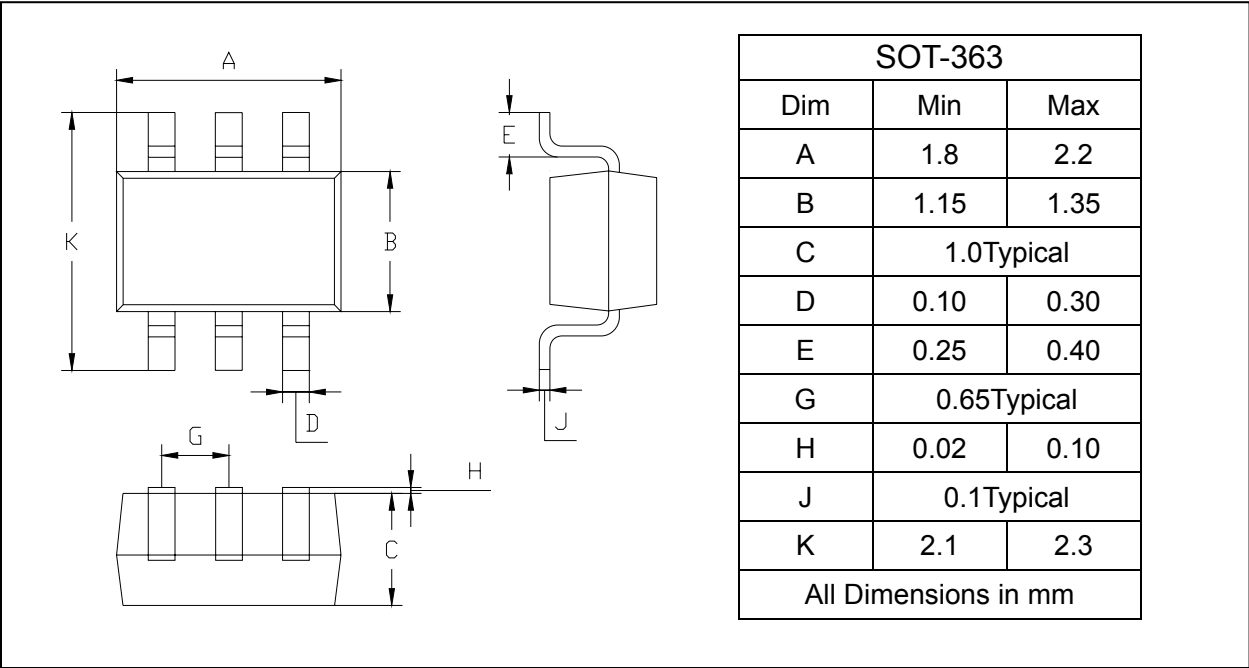
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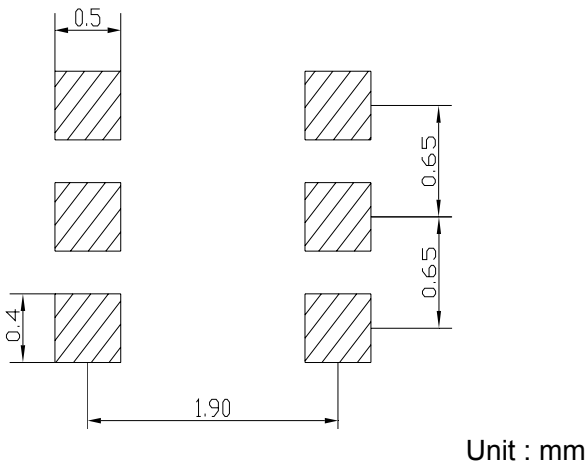
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-363



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

|         |         |                |
|---------|---------|----------------|
| Device  | Package | Shipping       |
| RB731XN | SOT-363 | 3000/Tape&Reel |