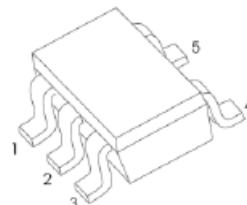


## SOT-353 Plastic-Encapsulate Diodes

**RB481K** SCHOTTKY BARRIER DIODE

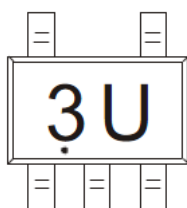
SOT-353



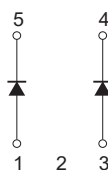
### FEATURES

- Low current rectification
- High reliability

### MARKING: 3U



Solid dot = Green molding compound device.



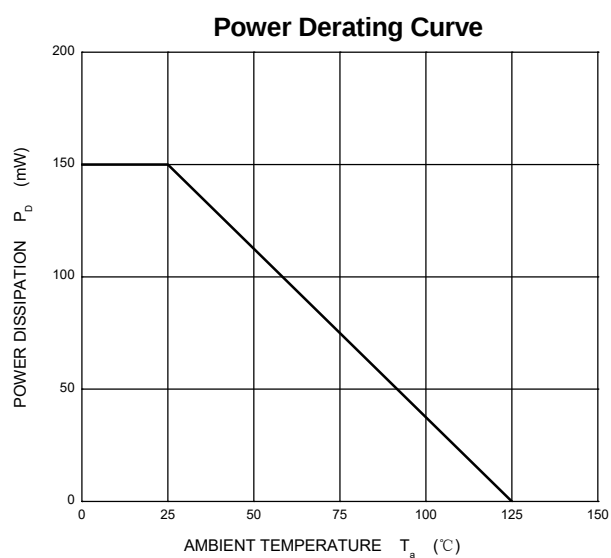
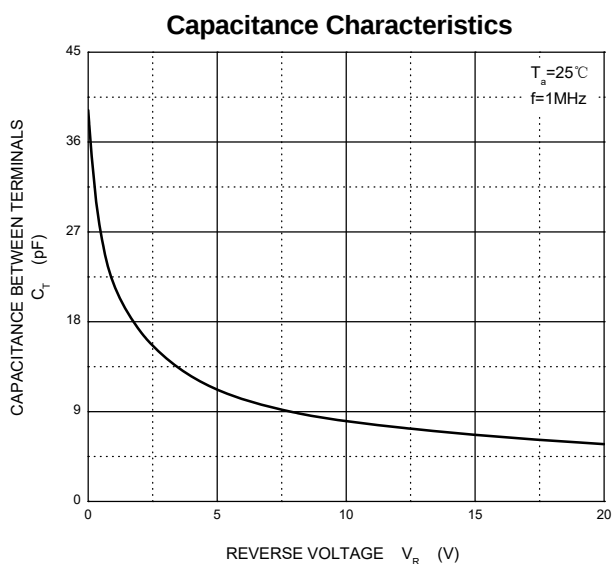
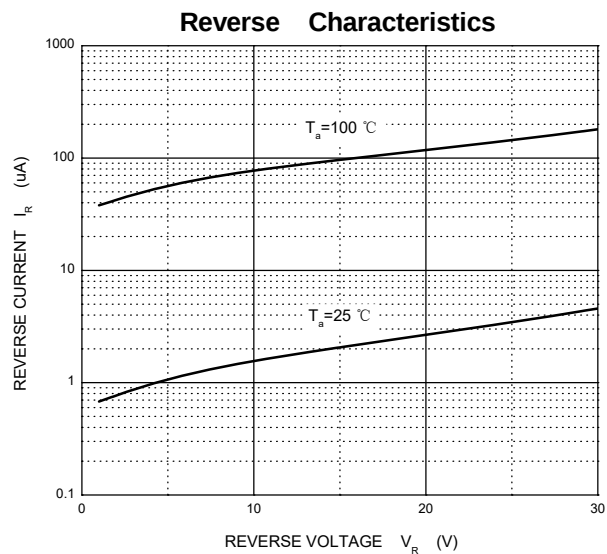
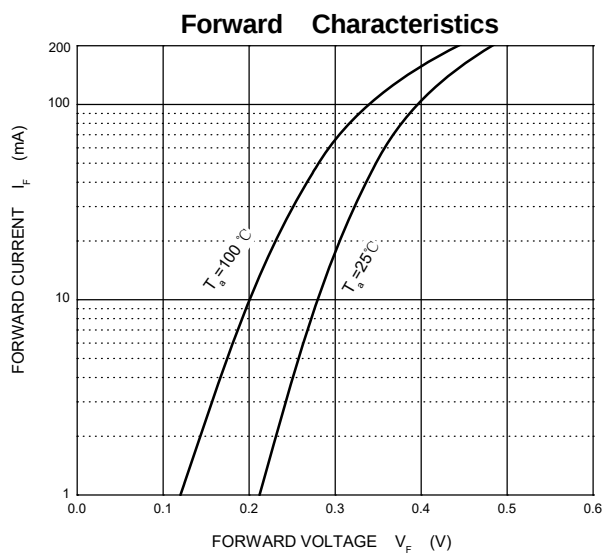
### Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

| Parameter                                          | Symbol          | Limit      | Unit |
|----------------------------------------------------|-----------------|------------|------|
| Peak reverse voltage                               | $V_{RM}$        | 30         | V    |
| DC reverse                                         | $V_R$           | 30         | V    |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | $I_{FSM}$       | 1          | A    |
| Mean rectifying current                            | $I_O$           | 0.2        | A    |
| Power Dissipation                                  | $P_d$           | 150        | mW   |
| Thermal Resistance Junction to Ambient             | $R_{\theta JA}$ | 667        | °C/W |
| Operating Junction Temperature Range               | $T_j$           | -40 ~ +125 | °C   |
| Storage Temperature Range                          | $T_{stg}$       | -55 ~ +150 | °C   |

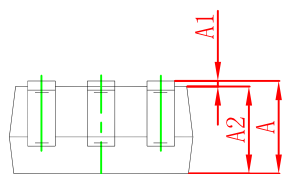
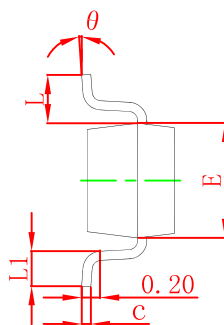
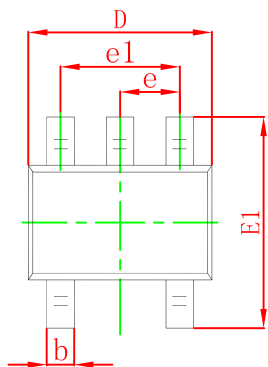
### Electrical Ratings @Ta=25°C

| Parameter       | Symbol | Min | Typ | Max  | Unit | Conditions  |
|-----------------|--------|-----|-----|------|------|-------------|
| Forward voltage | $V_F$  |     |     | 0.28 | V    | $I_F=1mA$   |
|                 |        |     |     | 0.33 |      | $I_F=10mA$  |
|                 |        |     |     | 0.43 |      | $I_F=100mA$ |
|                 |        |     |     | 0.5  |      | $I_F=200mA$ |
| Reverse current | $I_R$  |     |     | 30   | μA   | $V_R=10V$   |

## Typical Characteristics

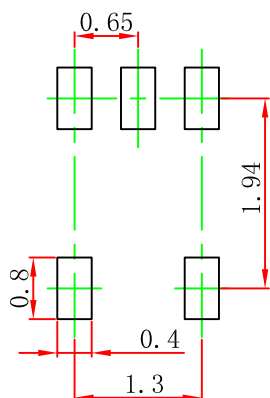


## SOT-353 Package Outline Dimensions



| Symbol   | Dimensions In Millimeters |       | Dimensions In Inches |       |
|----------|---------------------------|-------|----------------------|-------|
|          | Min                       | Max   | Min                  | Max   |
| A        | 0.900                     | 1.100 | 0.035                | 0.043 |
| A1       | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2       | 0.900                     | 1.000 | 0.035                | 0.039 |
| b        | 0.150                     | 0.350 | 0.006                | 0.014 |
| c        | 0.100                     | 0.150 | 0.004                | 0.006 |
| D        | 2.000                     | 2.200 | 0.079                | 0.087 |
| E        | 1.150                     | 1.350 | 0.045                | 0.053 |
| E1       | 2.150                     | 2.400 | 0.085                | 0.094 |
| e        | 0.650 TYP                 |       | 0.026 TYP            |       |
| e1       | 1.200                     | 1.400 | 0.047                | 0.055 |
| L        | 0.525 REF                 |       | 0.021 REF            |       |
| L1       | 0.260                     | 0.460 | 0.010                | 0.018 |
| $\theta$ | 0°                        | 8°    | 0°                   | 8°    |

## SOT-353 Suggested Pad Layout



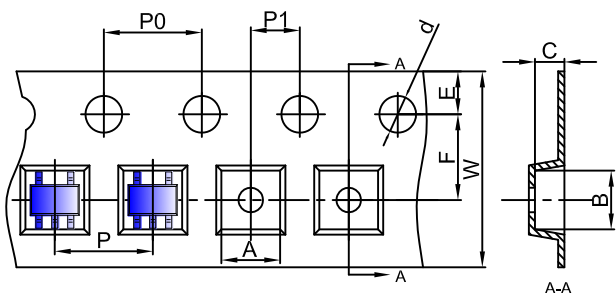
Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$  mm.
3. The pad layout is for reference purposes only.

### NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

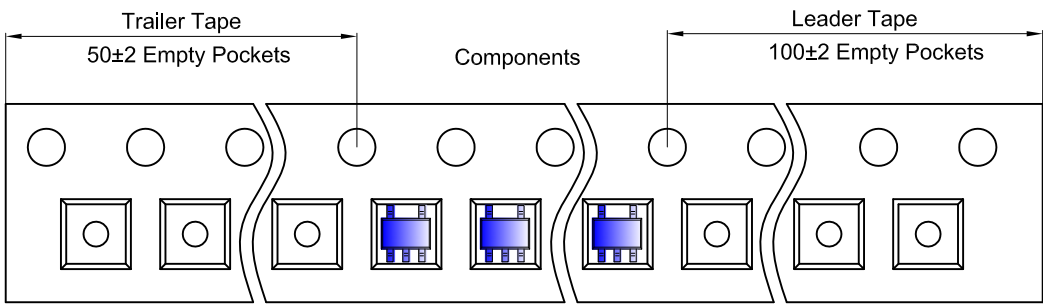
SOT-353 Embossed Carrier Tape



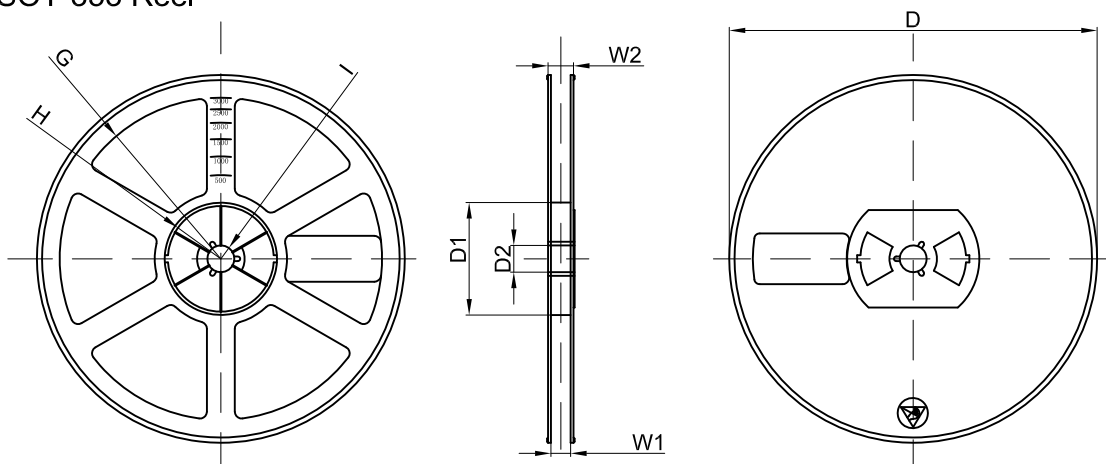
**Packaging Description:**  
SOT-353 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| Dimensions are in millimeter |      |      |      |       |      |      |      |      |      |      |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type                     | A    | B    | C    | d     | E    | F    | P0   | P    | P1   | W    |
| SOT-353                      | 2.25 | 2.55 | 1.20 | Ø1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

SOT-353 Tape Leader and Trailer



SOT-353 Reel



| Dimensions are in millimeter |         |       |       |        |        |       |      |       |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option                  | D       | D1    | D2    | G      | H      | I     | W1   | W2    |
| 7"Dia                        | Ø178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| REEL     | Reel Size | Box        | Box Size(mm) | Carton      | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|-------------|-----------------|----------|
| 3000 pcs | 7 inch    | 45,000 pcs | 203×203×195  | 180,000 pcs | 438×438×220     |          |