

# DC COMPONENTS CO., LTD.

#### RECTIFIER SPECIALISTS

DL60P

#### TECHNICAL SPECIFICATIONS OF SMALL SIGNAL SCHOTTKY DIODES

### **FEATURES**

- \* Metal silicon junction, majority carrier conduction.
- \* High current capability, low forward voltage drop.
- \* Extremely low reverse current IR
- \* Ultra speed switching characteristics
- \* Small temperature coefficient of forward characteristics
- \* Satisfactory Wave detection efficiency
- \* For use in RECORDER, TV, RADIO, TELEPHONE as detectors, super high speed switching circuits, small current rectifier

#### MECHANICAL DATA

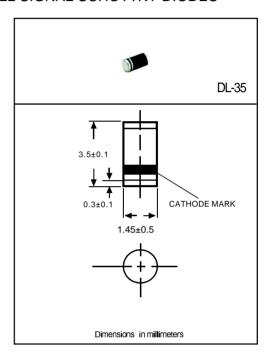
\* Case: DL-35 glass case

\* Polarity: color band denotes cathode end

\* Weight: 0.05 grams approx.

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



## ABSOLUTE RATINGS(LIMITING VALUES)

| PARAMETERS   |                      | SYMBOL                           | VALUE       | UNITS |
|--|----------------------|----------------------------------|-------------|-------|
| ZeneRepetitive Peak Reverse Voltage                                |                      | VRRM                             | 45          | Volts |
| Forward Continuous Current   | T <sub>A</sub> =25°C | lF                               | 50          | mA    |
| Peak Forward Surge Current(t=1S)                                   |                      | IFSM                             | 500         | mA    |
| Storage and junction Temperature Range                             |                      | T <sub>STG</sub> /T <sub>J</sub> | -65 to +125 | °C    |
| Maximum Lead Temperature for Soldering during 10S at 4mm from Case |                      | T∟                               | 230         | °C    |

#### **ELECTRICAL CHARACTERISTICS**

| 5.5                                 | TEST CONDITIONS   | SYMBOL | VALUE |      |       |
|-------------------------------------|---|--------|-------|------|-------|
| PARAMETERS                          | TEST CONDITIONS   |        | TYP.  | MAX. | UNITS |
| Forward Voltage                     | l⊧=1 mA   | VF     | 0.24  | 0.5  | Volts |
|                                     | l=200mA   | VF     | 0.65  | 1.0  |       |
| Reverse Current                     | V <sub>R</sub> =15V   | lR     | 0.5   | 1.0  | μΑ    |
| Junction Capacitance                | VR=10V f=1MHz   | Cı     | 6.0   |      | pF    |
| Detection Efficiency                | V <sub>I</sub> =3V f=30MHz C <sub>L</sub> =10pF R <sub>L</sub> =3.8KΩ | η      | 60    |      | %     |
| Reverse Recovey time                | F=IR=1mA Irr=1mA Rc=100Ω  | trr    |       | 1    | ns    |
| Junction Ambient Thermal Resistance |   | RθJA   | 400   |      | °C/W  |