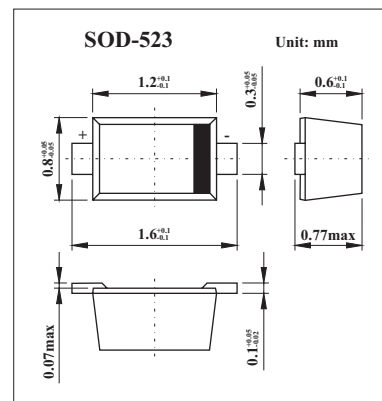


## Silicon Epitaxial Trench Pin Diode

## HVC135

## ■ Features

- Adopting the trench structure improves low capacitance.(C=0.6pF max)
- Low forward resistance. ( $r_f=2.0\ \Omega$  max)
- Low operation current.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

| Parameter            | Symbol    | Value       | Unit             |
|----------------------|-----------|-------------|------------------|
| Peak reverse voltage | $V_{RM}$  | 65          | V                |
| Reverse voltage      | $V_R$     | 60          | V                |
| Forward current      | $I_F$     | 100         | mA               |
| Power dissipation    | $P_d$     | 150         | mW               |
| Junction temperature | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage temperature  | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

| Parameter          | Symbol | Conditions                                           | Min | Typ | Max | Unit          |
|--------------------|--------|------------------------------------------------------|-----|-----|-----|---------------|
| Reverse current    | $I_R$  | $V_R = 60\text{ V}$                                  |     |     | 0.1 | $\mu\text{A}$ |
| Reverse voltage    | $V_F$  | $I_F = 2\text{ mA}$                                  |     |     | 0.9 | V             |
| Capacitance        | C      | $V_R = 1\text{ V}, f = 1\text{ MHz}$                 |     |     | 0.6 | pF            |
| Forward resistance | $r_f$  | $I_F = 2\text{ mA}, f = 100\text{ MHz}$              |     |     | 2.0 | $\Omega$      |
| ESD-Capability *1  |        | C =200pF, Both forward and reverse direction 1 pulse | 100 |     |     | V             |

Note

1. Failure criterion ;  $I_R > 100\text{ nA}$  at  $V_R = 60\text{ V}$ .

## ■ Marking

|         |    |
|---------|----|
| Marking | P5 |
|---------|----|