

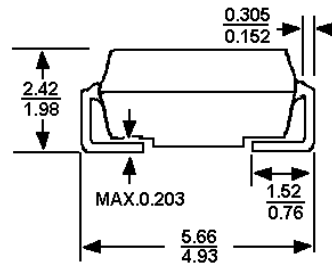
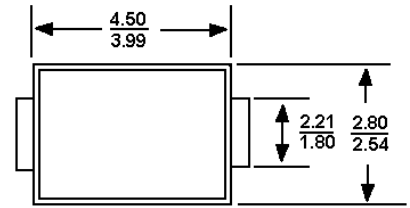
# RB161L-40

## SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE FOR HIGH FREQUENCY RECTIFICATION AND SWITCHING POWER SUPPLY

### Features

- \* Compact power mold type
- \* Ultra low  $V_F$  ( $V_F = 0.35V$  typ. at 1A)
- \*  $V_{RM} = 40V$  guaranteed

SMA DO-214AC



Dimensions in mm

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load,

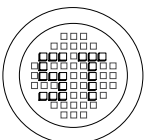
For capacitive load, derate by 20%

|                                       | Symbols   | Limits      | Unit  |
|---------------------------------------|-----------|-------------|-------|
| Peak reverse voltage                  | $V_{RM}$  | 40          | Volts |
| DC blocking voltage                   | $V_R$     | 20          | Volts |
| Mean rectifying current <sup>1)</sup> | $I_O$     | 1           | Amps  |
| Peak forward surge current            | $I_{FSM}$ | 70          | Amps  |
| Operating junction temperature range  | $T_J$     | 125         | °C    |
| Storage temperature range             | $T_S$     | -40 to +125 | °C    |

Notes: 1) When mounting on PCB

### Electrical characteristics ( $T_a = 25$ °C)

| Parameter                       | Symbol | Min. | Typ. | Max. | Unit  |
|---------------------------------|--------|------|------|------|-------|
| Forward voltage at $I_F = 1.0A$ | $V_F$  | -    | -    | 0.40 | Volts |
| Reverse current at $V_R = 20V$  | $I_R$  | -    | -    | 1    | mA    |



®

**РАДИОТЕХ-ТРЕЙД**

Тел.: (495) 795-0805  
Факс: (495) 234-1603  
Эл. почта: info@rct.ru  
Веб: www.rct.ru

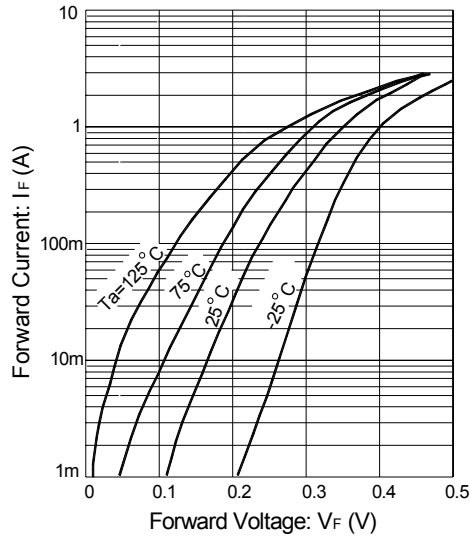


Fig. 1 Forward Characteristics

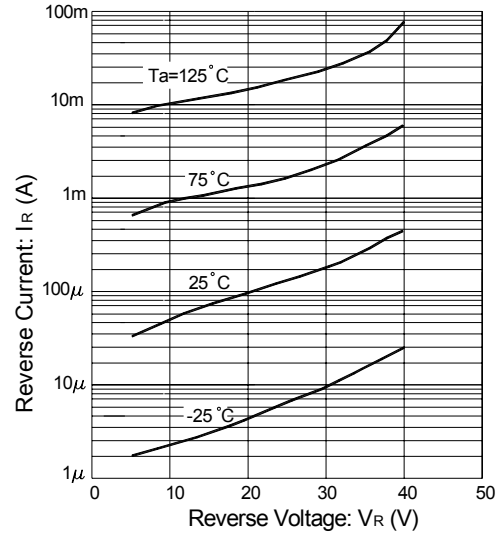


Fig. 2 Reverse Characteristics

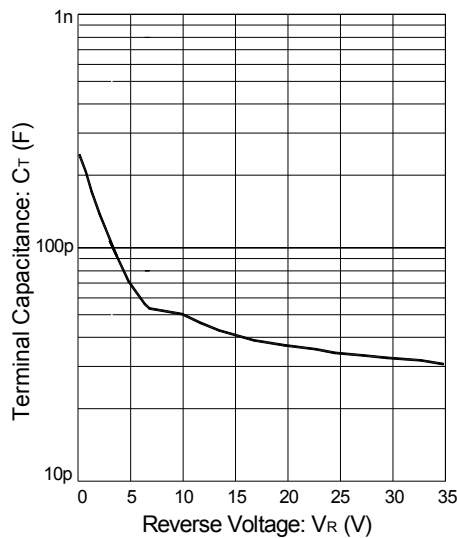


Fig. 3 Capacitance Between Terminals Characteristics

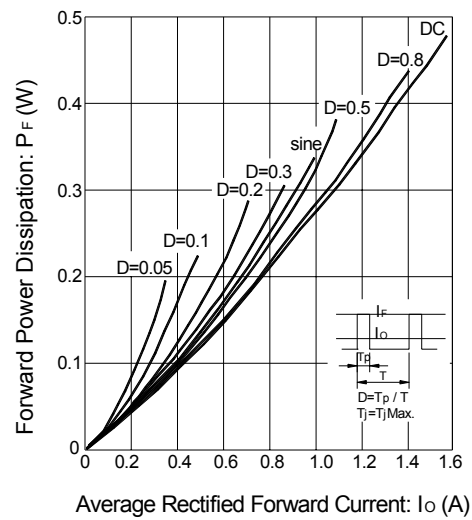


Fig. 4 Forward Power Dissipation Characteristics

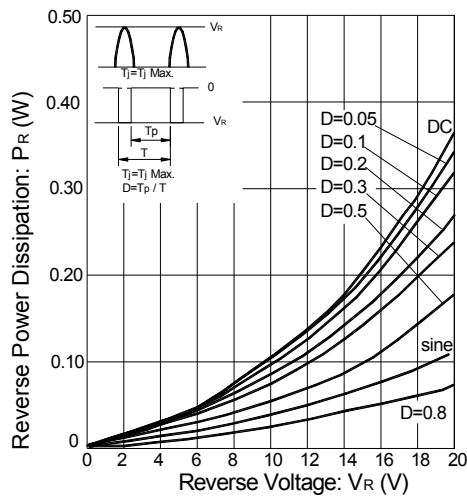


Fig. 5 Reverse Power Dissipation Characteristics

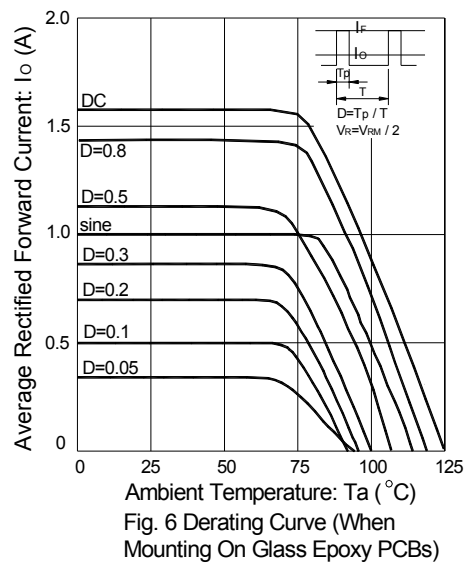
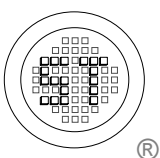
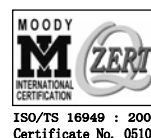


Fig. 6 Derating Curve (When Mounting On Glass Epoxy PCBs)



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
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ISO 9001 : 2000  
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