SCHOTTKY BARRIER DIODE

Applications
Low current rectification

Features
Extremely small surface mounting type. (DFN0603)
Low IR.
High reliability.
We declare that the material of product compliance with RoHS requirements.

Construction
Silicon epitaxial planar

Device Marking And Ordering Information

<table>
<thead>
<tr>
<th>Device</th>
<th>Marking</th>
<th>Shipping</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS5X6BF</td>
<td>R</td>
<td>15000/Tape&amp;Reel</td>
</tr>
</tbody>
</table>

Maximum Ratings \((T_A=25^\circ C)\)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Limits</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC reverse voltage</td>
<td>(V_R)</td>
<td>30</td>
<td>V</td>
</tr>
<tr>
<td>Mean rectifying current</td>
<td>(I_0)</td>
<td>100</td>
<td>mA</td>
</tr>
<tr>
<td>Peak forward surge current</td>
<td>(I_{FDM})</td>
<td>2</td>
<td>A</td>
</tr>
<tr>
<td>Junction temperature</td>
<td>(T_j)</td>
<td>125</td>
<td>(^\circ C)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>(T_{stg})</td>
<td>-40~+150</td>
<td>(^\circ C)</td>
</tr>
</tbody>
</table>

Electrical Characteristics \((T_A=25^\circ C)\)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min.</th>
<th>Typ</th>
<th>Max.</th>
<th>Unit</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward voltage</td>
<td>(V_F)</td>
<td>–</td>
<td>0.29</td>
<td>0.47</td>
<td>V</td>
<td>(I_F=100)mA</td>
</tr>
<tr>
<td>Reverse current</td>
<td>(I_R)</td>
<td>–</td>
<td>–</td>
<td>0.35</td>
<td>(µA)</td>
<td>(V_{R}=10)V</td>
</tr>
<tr>
<td>Reverse current</td>
<td>(I_R)</td>
<td>–</td>
<td>–</td>
<td>0.7</td>
<td>(µA)</td>
<td>(V_{R}=30)V</td>
</tr>
<tr>
<td>Total capacitance</td>
<td>(C_T)</td>
<td>–</td>
<td>8.2</td>
<td>–</td>
<td>(pF)</td>
<td>(V_{R}=0)V, (f=1)MHz</td>
</tr>
</tbody>
</table>

RS5X6BF

1
Cathode

2
Anode

DFN0603-D

RS INDUSTRY LIMITED
RS5X6BF

Electrical characteristic curves (Ta=25°C)

FORWARD CURRENT: IF(mA)

REVERSE CURRENT: IR(nA)

FORWARD VOLTAGE: VF(mV)
VF–IF CHARACTERISTICS

REVERSE VOLTAGE: VR(V)
VR–IR CHARACTERISTICS

CAPACITANCE BETWEEN TERMINALS: Ct(pF)
VR–Ct CHARACTERISTICS

f=1MHz

Ta=-25℃
Ta=75℃
Ta=25℃
Ta=125℃
RS5X6BF

DFN0603-D

DIMENSION OUTLINE:

Unit:mm