

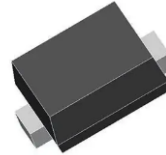
RB521CS-30

Features

- Low VF
- High reliability
- We declare that the material of product compliance with RoHS requirements and Halogen Free
- S-prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable

Application

- Low current rectification



SOD-923 top view



Schematic diagram



Marking and pin assignment

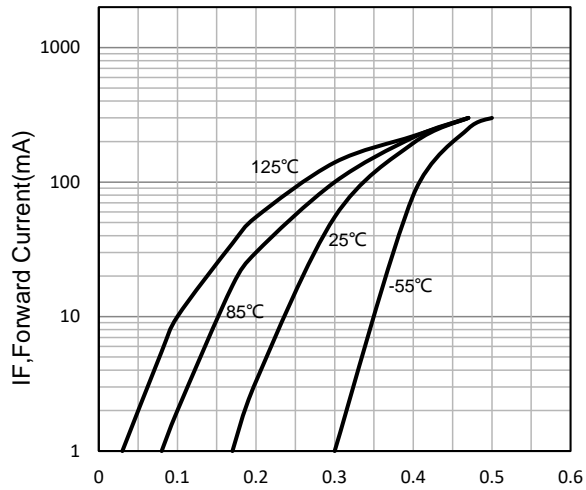
Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|-----------|--|----------|------------------|
| V_R | Reverse voltage (DC) | 30 | V |
| I_O | Average rectified forward current | 100 | mA |
| I_{FSM} | Forward current surge peak (60Hz · 1cyc) | 500 | mA |
| T_J | Junction temperature | 125 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | -40~+125 | $^\circ\text{C}$ |

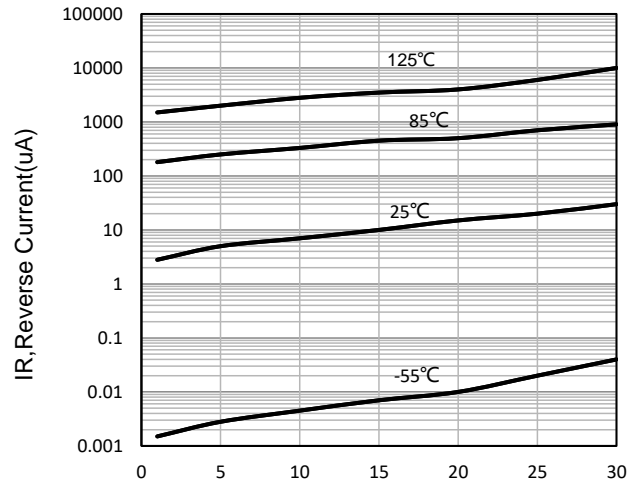
Electrical Characteristics ($T_J=25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | Condition | Min | Typ | Max | Unit |
|------------|-----------------|---------------------|-----|-----|------|---------------|
| $V_{(BR)}$ | Reverse voltage | $I_R=10\mu\text{A}$ | 30 | -- | -- | V |
| I_R | Reverse current | $V_R=10\text{V}$ | -- | -- | 10 | μA |
| V_F | Forward voltage | $I_F=10\text{mA}$ | -- | -- | 0.35 | V |
| | | $I_F=20\text{mA}$ | -- | -- | 0.4 | V |

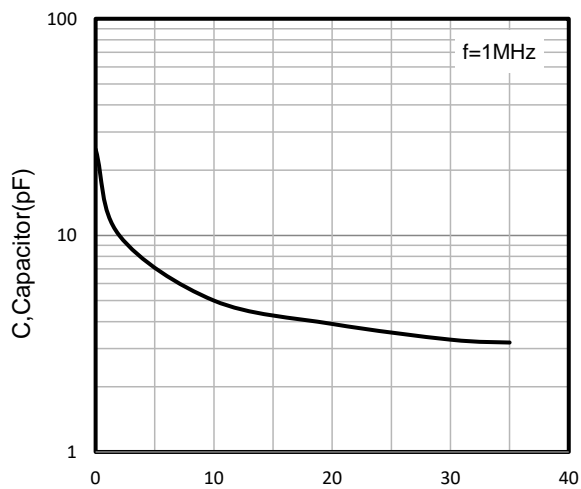
Typical Operating Characteristics



V_F , Forward Voltage(V)
 Forward Characteristics



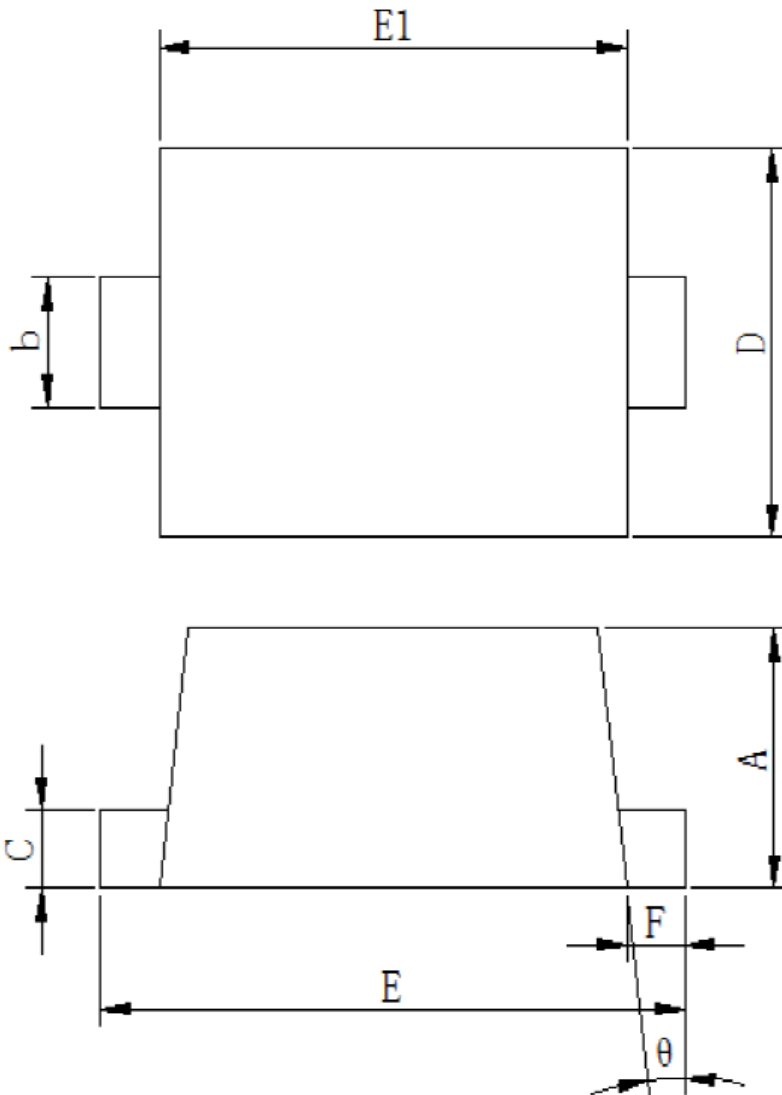
V_R , Reverse Voltage(V)
 Reverse Characteristics



V_R , Reverse Voltage(V)
 Capacitor Characteristics

RB521CS-30

SOD-923 Package information



| Symbol | Dimensions in Millimeters(mm) | | Dimensions In Inches | |
|----------|-------------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.360 | 0.440 | 0.014 | 0.017 |
| b | 0.150 | 0.250 | 0.006 | 0.010 |
| c | 0.070 | 0.170 | 0.003 | 0.007 |
| D | 0.550 | 0.650 | 0.022 | 0.026 |
| E | 0.950 | 1.100 | 0.037 | 0.043 |
| E1 | 0.750 | 0.850 | 0.030 | 0.033 |
| F | 0.050 | 0.150 | 0.002 | 0.006 |
| θ | - | 5° | - | 5° |