

Micro Commercial Components



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SRA251 THRU SRA257

Epoxy meets UL 94 V-0 flammability rating Moisture Sensitivity Level 1

Low Cost

Features

- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- For Automotive Applications
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

Maximum Ratings

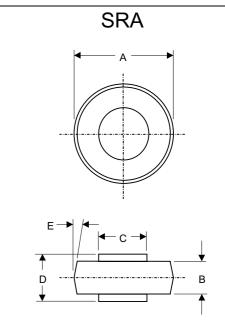
- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

| MCC | Device | Maximum | Maximum | Maximum |
|---------|---------|-----------|---------|----------|
| Catalog | Marking | Recurrent | RMS | DC |
| Number | | Peak | Voltage | Blocking |
| | | Reverse | | Voltage |
| | | Voltage | | |
| SRA251 | | 50V | 35V | 50V |
| SRA252 | | 100V | 70V | 100V |
| SRA253 | | 200V | 140V | 200V |
| SRA254 | | 400V | 280V | 400V |
| SRA255 | | 600V | 420V | 600V |
| SRA256 | | 800V | 560V | 800V |
| SRA257 | | 1000V | 700V | 1000V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

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|---|--------------------|----------------|--|--|--|
| Average Forward Current | I _{F(AV)} | 25A | T _c = 125°C | | |
| Peak Forward Surge Current | I _{FSM} | 400A | 8.3ms, half sine | | |
| Maximum Instantaneous Forward Voltage | V_{F} | 1.1V | I _{FM} = 25A; T _J = 25°C* | | |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I _R | 25 μΑ 250μΑ | T _J = 25°C T _J = 100°C | | |
| Typical Junction Capacitance | CJ | 300pF | Measured at 1.0MHz, V _R =4.0V | | |

25Amp Standard



| DIMENSIONS | | | | | | |
|------------|--------|------|------|------|------|--|
| | INCHES | | MM | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | |
| Α | .332 | .342 | 8.43 | 8.69 | | |
| В | .165 | .175 | 4.19 | 4.45 | | |
| С | .218 | .222 | 5.54 | 5.64 | | |
| D | .234 | .246 | 5.94 | 6.25 | | |
| Е | | 5' | | 5' | | |
| | | | | | | |

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

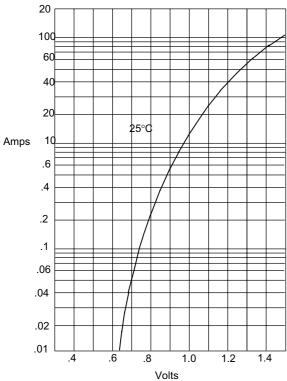
Rectifier 50 to 1000 Volts

^{*}Pulse test: Pulse width 300 μ sec, Duty cycle 2%

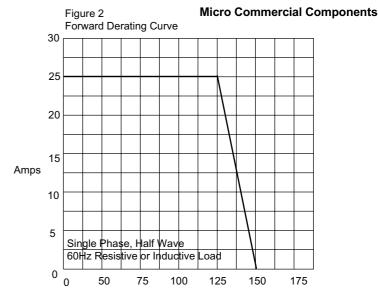
SRA251 thru SRA257



Figure 1 Typical Forward Characteristics

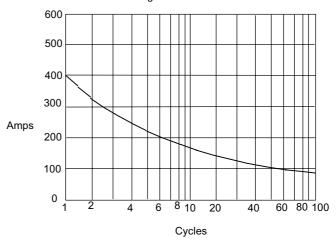


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



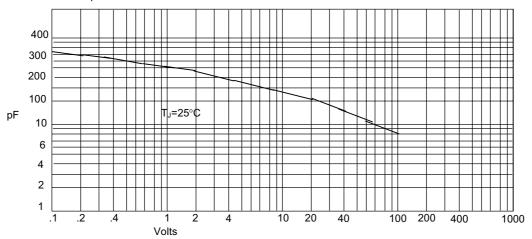
°C
Average Forward Rectified Current - Amperes/ersus
Case Temperature -°C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes*versus* Number Of Cycles At 60Hz - Cycles

Figure 3
Junction Capacitance



Junction Capacitance - pF*versus* Reverse Voltage - Volts



Ordering Information:

| Device | Packing | |
|----------------|-----------------|--|
| Part Number-BP | Bulk: 1Kpcs/Box | |

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