



DISCRETE SEMICONDUCTORS

Meeting AEC-Q101 Standard

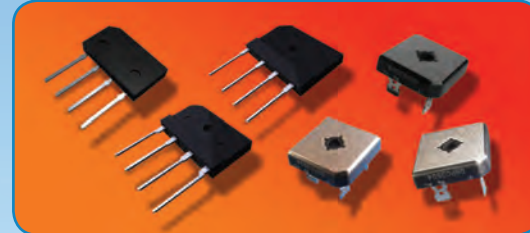
Fast / Super-Fast / Ultra-Fast Recovery Rectifiers

- Diffused junction
- Fast switching for high efficiency (35nS-500nS)
- High current capability and low forward voltage drop
- Low reverse leakage current



Bridge Rectifiers

- Average rectified current up to 50 A
- Glass and silicon passivation
- In-line, square, low-profile and SMD packages
- Low leakage and low forward voltage
- Schottkys available 1 A – 3 A
- UL-recognized



TVS Diodes and Arrays

- Unidirectional and bidirectional polarities
- Multi line data protection
- Fast response time with excellent clamping capability
- Peak power ratings from 60 W – 5,000 W
- Low incremental surge resistance



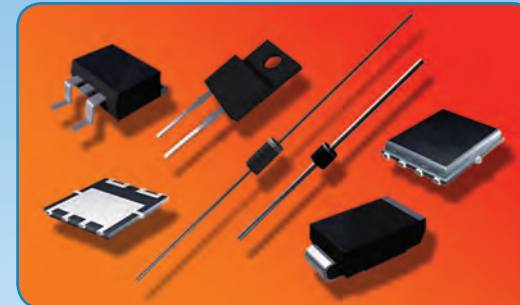
Zener Diodes, Small Signal Products

- Fast switching speed
- Surface mount and thru-hole
- High reliability
- Voltage regulation and small footprint



Schottky Diodes / Rectifiers

- High efficiency, low power loss
- 0.1 A – 40 A current capability
- Low forward voltage drop
- Fast switching
- Trench Schottky rectifiers for higher voltage



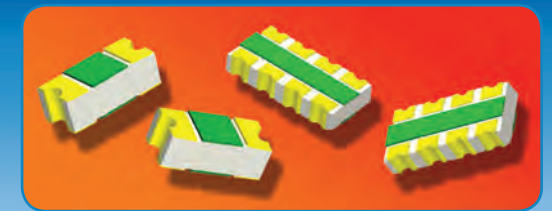
Switching Diodes

- Voltage ranges from 35 V – 250 V
- Fast switching speeds
- Low leakage current
- Small surface mount packages



Polymer ESD Diodes

- Optimal protection for high frequency, low voltage applications
- Extremely low capacitance
- Very low leakage current
- Fast response time
- Bidirectional ESD protection



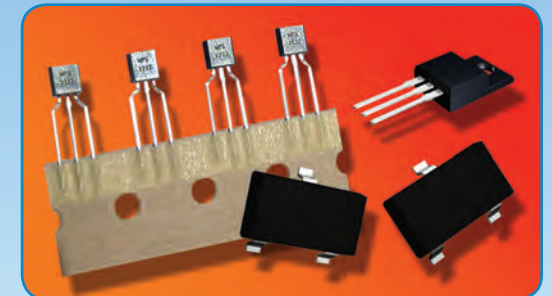
High Voltage Diodes

- Voltage range 1,200 V – 18,000 V
- High current capability
- High temperature rated packaging
- Low forward voltage drop
- Reverse power dissipation capability



Transistors

- Switching and general purpose
- NPN and PNP, 30 V – 500 V range
- Fast switching, Low saturation voltages
- High reliability



3-Phase Recifiers

- Average 50 A
- Reverse voltage up to 1,600 V
- In-line
- Low leakage
- UL-recognized



CAPACITORS

Electrolytic

Meeting AEC-Q200 Standard

Surface Mount (V-Chip)

- 4 V ~ 450 V
- .1 μ F ~ 10,000 μ F
- 3 mm dia. ~ 21 mm dia.
- 260° C reflow ready
- Up to 5,000 hours
- Wide temperature range (-55° C to 125° C)
- Largest production capacity in China



Low Impedance

- 6.3 V ~ 450 V
- 2.2 μ F ~ 18,000 μ F
- Wide temperature range (-55° C to 125° C)
- Up to 10,000 hours
- Low-cost solution against Japanese brand



Snap In / Screw Mount

- Up to 525 V
- Up to 820,000 μ F
- 2,000 ~ 20,000 hours
- Custom specs available
- Power and inverter applications



Solid Organic Polymer (OP-CAP)

- 2.5 V ~ 63 V
- Ultra-low ESR
- 260° C reflow ready
- 6.8 μ F ~ 3,500 μ F
- High ripple current
- Long Life



Hybrid Polymer NEW

- 16 V ~ 80 V
- 10 μ F ~ 470 μ F
- Long Life
- Low ESR
- High Temp
- High Ripple Current



Film Meeting AEC-Q200 Standard

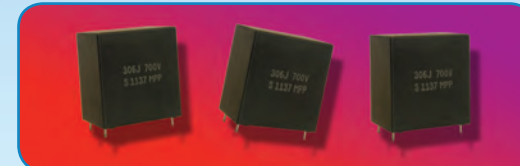
Interference Suppressor

- 275 V ~ 760 V AC
- X1, X2, Y1, Y2 metalized polypropylene
- Temperature Humidity Bias (THB) Tested
- Agency approvals
- .001 μ F ~ 50 μ F



Power Films

- DC-link for PBC
- DC-link (dry type-plastic)
- DC-link (dry type-aluminum)
- High voltage DC-link
- Customized
- IGBT snubber



SWITCHES

Standard or custom configurations available

- DIP
- Rotary
- Illuminated
- Tact
- Slide



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Thinking Beyond the Board

The dynamics of today's component supply chain are far more complex than ever before.

Nowhere is this more true than in the global industrial electronics market where purchasing, engineering and supply chain management come together to produce quality products and systems that improve the way we handle power on the board and beyond.

As a specialist in capacitors¹ and discrete semiconductors² since 1981, Surge Components is among an elite group of manufacturing and marketing organizations around the world that has the capability to provide in-depth technical support, guidance and direction, and to function as the direct link to our extensive selection of high-performance components.

1. TS16949 qualified.

2. AEC-Q101, AEC-Q200 qualified.

 **URGE**

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PRODUCT OVERVIEW

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