



United Silicon Carbide, inc. the power to do **more** with **less**

## Schottky Diodes Selector Guide

| Part Number  | Package  | V    | If typ | Qc typ | V <sub>F</sub> typ |
|--------------|----------|------|--------|--------|--------------------|
| UJD06504Z    | Die      | 650V | 4A     | 6nC    | 1.5V               |
| UJD06504TS   | TO220-2L | 650V | 4A     | 6nC    | 1.5V               |
| UJD06506Z    | Die      | 650V | 6A     | 9nC    | 1.5V               |
| UJD06506TS   | TO220-2L | 650V | 6A     | 9nC    | 1.5V               |
| UJD06508Z    | Die      | 650V | 8A     | 13nC   | 1.5V               |
| UJD06508TS   | TO220-2L | 650V | 8A     | 13nC   | 1.5V               |
| UJD06510Z    | Die      | 650V | 10A    | 16nC   | 1.5V               |
| UJD06510TS   | TO220-2L | 650V | 10A    | 16nC   | 1.5V               |
| UJD06516K    | TO-247   | 650V | 16A    | 26nC   | 1.5V               |
| UJD06520K    | TO-247   | 650V | 20A    | 32nC   | 1.5V               |
| UJD06550Z*   | Die      | 650V | 50A    | 103nC  | 1.55V              |
| UJD065100Z*  | Die      | 650V | 100A   | 145nC  | 1.5V               |
| UJ3D065200Z* | Die      | 650V | 200A   | 386nC  | 1.5V               |

| Part Number | Package  | V     | If typ | Qc typ | V <sub>F</sub> typ |
|-------------|----------|-------|--------|--------|--------------------|
| UJ2D1205Z   | Die      | 1200V | 5A     | 14nC   | 1.5V               |
| UJ2D1205T   | TO220-2L | 1200V | 5A     | 14nC   | 1.5V               |
| UJ2D1210Z   | Die      | 1200V | 10A    | 35nC   | 1.5V               |
| UJ2D1210T   | TO220-2L | 1200V | 10A    | 35nC   | 1.5V               |
| UJ2D1215Z   | Die      | 1200V | 15A    | 60nC   | 1.5V               |
| UJ2D1215T   | TO220-2L | 1200V | 15A    | 60nC   | 1.5V               |
| UJ2D1220K   | TO247    | 1200V | 20A    | 35nC   | 1.5V               |
| UJ2D1230K   | TO247    | 1200V | 30A    | 60nC   | 1.5V               |
| UJ2D1250Z   | Die      | 1200V | 50A    | 158nC  | 1.5V               |
| UJ3D12100Z* | Die      | 1200V | 100A   | 316nC  | 1.5V               |

## SiC Schottky with Surge Bypass Diode 650V

USCi's Surge Bypass diode combination provides the low  $Q_c$  of Silicon Carbide with the high IFSM of Silicon to provide a single device "Surge" solution in AC/DC Boost and Power Factor Correction Converters.

| Part Number       | SiC Diode |      | Si Surge Bypass Diode |       |       |      |      |
|-------------------|-----------|------|-----------------------|-------|-------|------|------|
|                   | Package   | V    | If                    | $Q_c$ | $V_F$ | V    | IFSM |
| <b>UJDS06504T</b> | TO220-3L  | 650V | 4A                    | 6nC   | 1.5V  | 600V | 100A |
| <b>UJDS06506T</b> | TO220-3L  | 650V | 6A                    | 9nC   | 1.5V  | 600V | 100A |
| <b>UJDS06508T</b> | TO220-3L  | 650V | 8A                    | 13nC  | 1.5V  | 600V | 100A |
| <b>UJDS06510T</b> | TO220-3L  | 650V | 10A                   | 16nC  | 1.5V  | 600V | 100A |



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## SiC Cascodes Selector Guide

| Part Number | Package | V    | RDS(on) | Id max |
|-------------|---------|------|---------|--------|
| UJC06505K*  | TO-247  | 650V | 45 mΩ   | 20A    |

| Part Number | Package | V     | RDS(on) | Id max |
|-------------|---------|-------|---------|--------|
| UJC1206K*   | TO-247  | 1200V | 60 mΩ   | 35A    |
| UJC1210K*   | TO-247  | 1200V | 100 mΩ  | 20A    |

## SiC JFETs

| Part Number | Package | V     | RDS(on) | Id max |
|-------------|---------|-------|---------|--------|
| UJN1205K    | TO247   | 1200V | 45 mΩ   | 38A    |
| UJN1205Z    | Die     | 1200V | 45 mΩ   | 38A    |
| UJN1208K    | TO247   | 1200V | 80 mΩ   | 21A    |
| UJN1208Z    | Die     | 1200V | 80 mΩ   | 21A    |