

1 Products affected

| Product hierarchy no. * | | | | Part no. | SBU | Type / Description | Customer part no. |
|-------------------------|-----|-----|------------|--------------|------------|-------------------------------------|-------------------|
| SBU | PG | PGU | Type | | | | |
| 01 | 001 | 025 | 0000000221 | 3413.0002.11 | Protection | USFF 1206 – 0.050 A – 100 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0002.22 | Protection | USFF 1206 – 0.050 A – 1'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0002.24 | Protection | USFF 1206 – 0.050 A – 5'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0002.26 | Protection | USFF 1206 – 0.050 A – 10'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0008.11 | Protection | USFF 1206 – 0.160 A – 100 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0008.22 | Protection | USFF 1206 – 0.160 A – 1'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0008.24 | Protection | USFF 1206 – 0.160 A – 5'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0008.26 | Protection | USFF 1206 – 0.160 A – 10'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0009.11 | Protection | USFF 1206 – 0.200 A – 100 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0009.22 | Protection | USFF 1206 – 0.200 A – 1'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0009.24 | Protection | USFF 1206 – 0.200 A – 5'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0009.26 | Protection | USFF 1206 – 0.200 A – 10'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0010.11 | Protection | USFF 1206 – 0.250 A – 100 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0010.22 | Protection | USFF 1206 – 0.250 A – 1'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0010.24 | Protection | USFF 1206 – 0.250 A – 5'000 pieces | |
| 01 | 001 | 025 | 0000000221 | 3413.0010.26 | Protection | USFF 1206 – 0.250 A – 10'000 pieces | |

*SBU (2-digit) / PG (3-digit) / PGU (3-digit) / Type (10-digit)

2 Type of change

Derating of the breaking capacity value at 125VAC only. DC breaking capacity remains the same.

3 Detailed description of change

| Old label (Sample) | New label (Sample) |
|---|---|
| <p>Old label (Sample) details: Part No. 3413.0008.24, Qty. 5000, USFF 1206 Surface mount fuse, UL 248-1 / 248-14 FF 160mA 125V AC / 63V. Test values: IR 100A / 125V AC, IR 100A / 63V DC (circled in red). Date Code 1552.</p> | <p>New label (Sample) details: Part No. 3413.0008.24, Qty. 5000, USFF 1206 Surface mount fuse, UL 248-1 / 248-14 FF 160mA 125VAC/63VDC. Test values: IR 10A / 125V AC, IR 100A / 32V AC, IR 100A / 63V DC (circled in red). Date Code 1602.</p> |

| Product Change Notification | | | | | PCN Derating USFF 1206 | | |
|-----------------------------|---------------|--------------|-------------|-----------------|------------------------|--------|-------------|
| owner | creation date | release date | released by | change order no | rev | page | D10-000-679 |
| ganderka | 2015-12-18 | 2016-01-13 | bergerra | 2008873 | A | 1 of 2 | |

| Old product rating (UL) | New product rating (UL) |
|-------------------------------------|---|
| AC: 100 A @ 125V AC – p.f. 0.95-1.0 | AC: 10A @ 125V AC - p.f. 0.99-1.0 100A @ 32 V AC - p.f. 0.99-1.0 |
| DC: 100 A @ 63V DC, Resistive | DC: 100 A @ 63V DC, Resistive |

4 Reason of change

A recent breaking capacity test conducted by UL resulted in a derating of the breaking capacity of the USFF SMD fuse at 125VAC to 10A. The breaking capacity at DC voltage passed at 100A without any issues.

The USFF fuse passed prior UL testing at 100A / 125VAC. The derating is attributed to the fact that UL uses a range of closing angles for testing breaking capacity. The closing angle describes the angle of the sine wave at the moment when the test circuit is switched on. It determines the amount of energy of the signal and hence the results. Refer to Fig. 1 below.

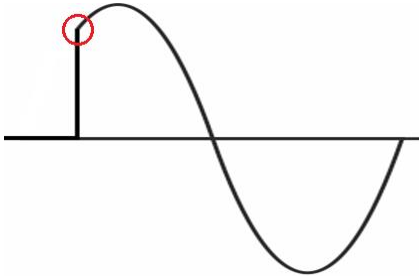


Fig. 1

The published breaking capacity for applications > 32VAC has been derated on our datasheet accordingly.

5 Release date

The change takes effect immediately (Date code 1602 or higher on label).

6 Impact of change and recommended action

| Attribute | Affected | Comments |
|-----------------|----------|--|
| Form | No | |
| Fit | No | |
| Function | Yes | Breaking capacity rating for AC voltage derated. |
| Production Site | No | |
| Product Label | Yes | New breaking capacity rating at 125 VAC. Additional breaking capacity rating for 32 VAC. |
| Customer Action | Yes | Check electrical circuit design if nominal voltage is > 32 VAC, although unlikely as the USFF is moreover designed for use in DC applications. There is no change in DC ratings; therefore the use of the USFF in DC applications is not impacted. |

7 Reference Documents / Attachments

| Kind of document | Remarks |
|--------------------------------------|---------|
| Data Sheet USFF 1206 | |

| Product Change Notification | | | | | PCN Derating USFF 1206 | | |
|-----------------------------|---------------|--------------|-------------|-----------------|------------------------|--------|-------------|
| owner | creation date | release date | released by | change order no | rev | page | D10-000-679 |
| ganderka | 2015-12-18 | 2016-01-13 | bergerra | 2008873 | A | 2 of 2 | |