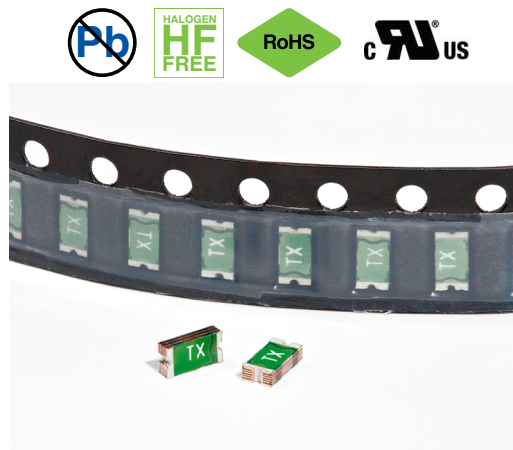


PTS1206

6-60 Volt DC surface mount resettable PTC fuses



Applications

- USB peripherals
- Plug and play protection for motherboards and peripherals
- Power tools
- Battery and port protection for mobile/smart phones
- Game console port protection
- Set-top-boxes
- Tablets, notebooks, netbooks, laptops and desktops
- Rechargeable battery packs
- Digital cameras
- Appliances and white goods
- Consumer electronics

Product features

- Positive Temperature Coefficient (PTC)
- SMT resettable fuse
- Low resistance
- Fast time-to-trip
- Current range from 0.05A to 2.0A
- 1206 (3216 metric) compact footprint

Agency information

- cURus Recognition file number: E343021
- TUV: R50192872

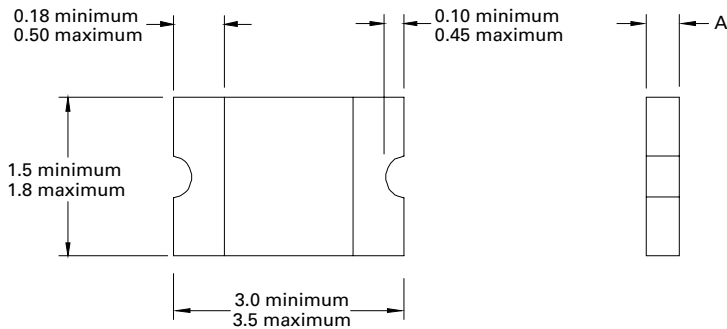
Product specifications

| Part Number ⁷ | V _{max} ¹ | I _{max} ² | I _{hold} ³ | I _{trip} ⁴ | P _d ⁵ | Time to trip (maximum) | | Resistance ⁶ | | Agency information | | |
|--------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|------------------------|-----------|--------------------------------------|--|--------------------|-------|-----|
| | (V _{dc}) | (A) | (A) | (A) | typical (W) | (A) | (seconds) | Initial (R) _i minimum (Ω) | Post trip (R) _p maximum (Ω) | Part marking | cURus | TUV |
| PTS120660V005 | 60 | 100 | 0.05 | 0.15 | 0.4 | 0.25 | 1.5 | 3.6 | 50 | TH | x | x |
| PTS120660V010 | 60 | 100 | 0.10 | 0.25 | 0.4 | 0.5 | 1.0 | 1.6 | 15 | TY | x | x |
| PTS120630V012 | 30 | 100 | 0.12 | 0.29 | 0.5 | 1 | 0.2 | 1.4 | 6 | TJ | x | x |
| PTS120630V016 | 30 | 100 | 0.16 | 0.37 | 0.5 | 1 | 0.3 | 1.1 | 4.5 | TK | x | x |
| PTS120624V020 | 24 | 100 | 0.20 | 0.42 | 0.6 | 8 | 0.1 | 0.65 | 2.6 | TL | x | x |
| PTS120616V025 | 16 | 100 | 0.25 | 0.50 | 0.6 | 8 | 0.08 | 0.55 | 2.3 | TN | x | x |
| PTS120616V035 | 16 | 100 | 0.35 | 0.75 | 0.6 | 8 | 0.1 | 0.3 | 1.2 | TP | x | x |
| PTS12066V050 | 6 | 100 | 0.50 | 1.0 | 0.6 | 8 | 0.1 | 0.15 | 0.7 | TQ | x | x |
| PTS120615V050 | 15 | 100 | 0.50 | 1.0 | 0.6 | 8 | 0.1 | 0.15 | 0.7 | TQ1 | x | x |
| PTS12066V075 | 6 | 100 | 0.75 | 1.5 | 0.6 | 8 | 0.2 | 0.1 | 0.29 | TR | x | x |
| PTS12066V100 | 6 | 100 | 1.0 | 1.8 | 0.8 | 8 | 0.3 | 0.065 | 0.21 | TS | x | x |
| PTS12066V110 | 6 | 100 | 1.1 | 2.2 | 0.8 | 8 | 0.3 | 0.07 | 0.2 | TU | x | x |
| PTS12066V150 | 6 | 100 | 1.5 | 3.0 | 0.8 | 8 | 1 | 0.04 | 0.12 | TV | x | x |
| PTS12066V200 | 6 | 100 | 2.0 | 3.5 | 1.0 | 8 | 1.5 | 0.02 | 0.08 | TX | x | x |

- V_{max}: Maximum continuous voltage the device can withstand without damage at current
- I_{max}: Maximum fault current the device can withstand without damage at rated voltage
- I_{hold}: Maximum current the device will pass without interruption at +23 °C still air
- I_{trip}: Minimum current that will transition the device from low resistance to high resistance at +23 °C still air
- P_d: Power dissipated from the device when in tripped state at +23 °C still air

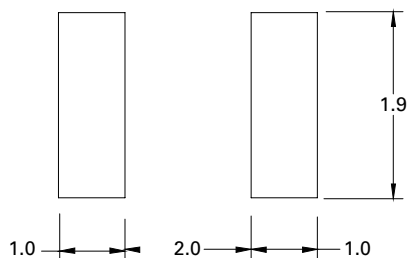
- R_i: Minimum resistance of the device at +23 °C
R_p: Maximum resistance of the device when measured one hour post reflow at +23 °C
- Part Number Definition: PTS1206xVxxx
PTS1206 = Product code and size
xV = Voltage rating (V_{max})
xxx = Ampere rating (I_{hold})

Dimensions—mm

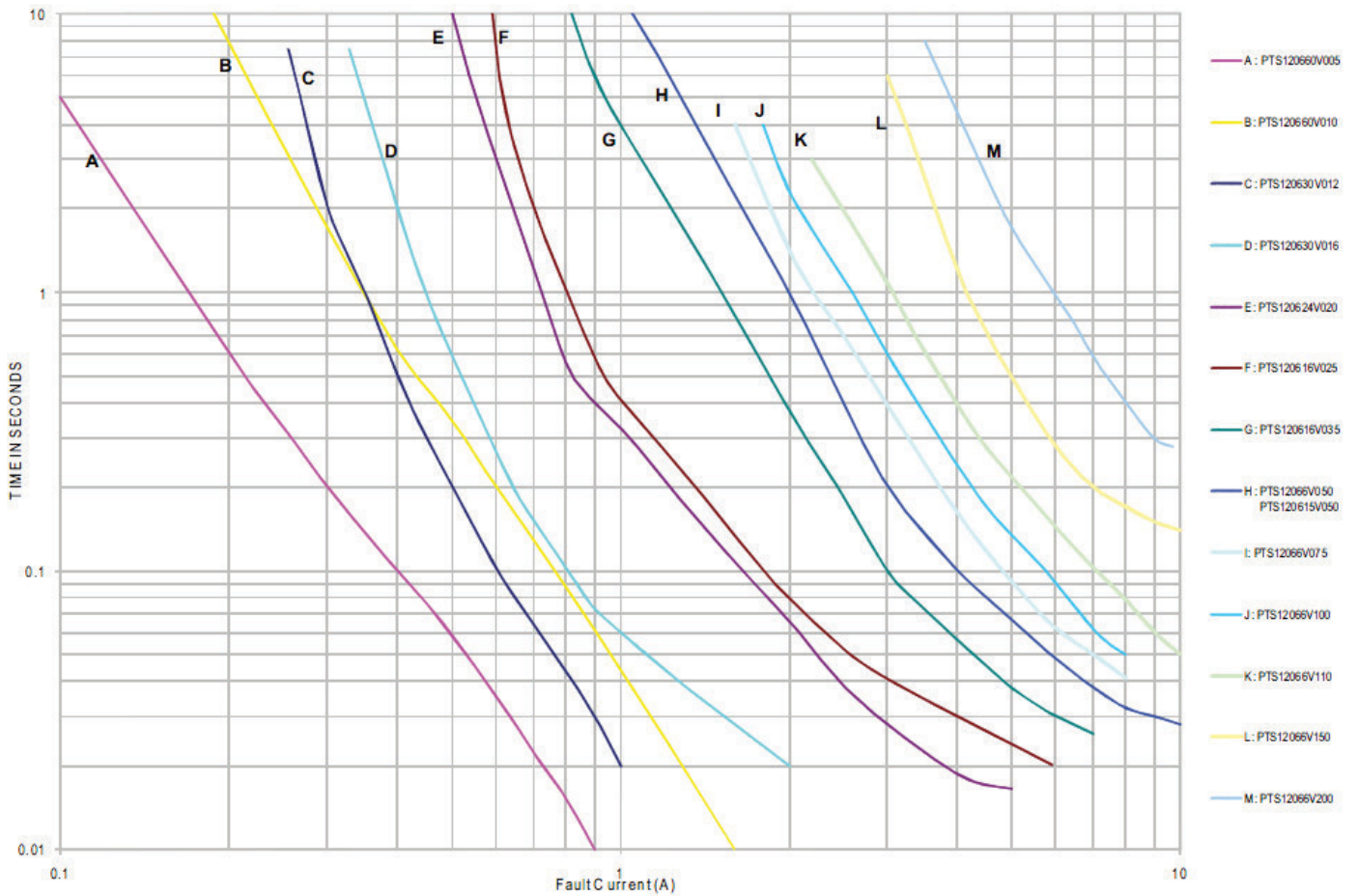


| Part number | A minimum | A maximum |
|---------------|-----------|-----------|
| PTS120660V005 | 0.50 | 0.90 |
| PTS120660V010 | 0.50 | 0.90 |
| PTS120630V012 | 0.35 | 0.90 |
| PTS120630V016 | 0.28 | 0.68 |
| PTS120624V020 | 0.28 | 0.68 |
| PTS120616V025 | 0.28 | 0.68 |
| PTS120616V035 | 0.28 | 0.68 |
| PTS12066V050 | 0.28 | 0.68 |
| PTS120615V050 | 0.28 | 1.06 |
| PTS12066V075 | 0.28 | 0.85 |
| PTS12066V100 | 0.40 | 0.88 |
| PTS12066V110 | 0.40 | 0.88 |
| PTS12066V150 | 0.55 | 1.15 |
| PTS12066V200 | 0.55 | 1.15 |

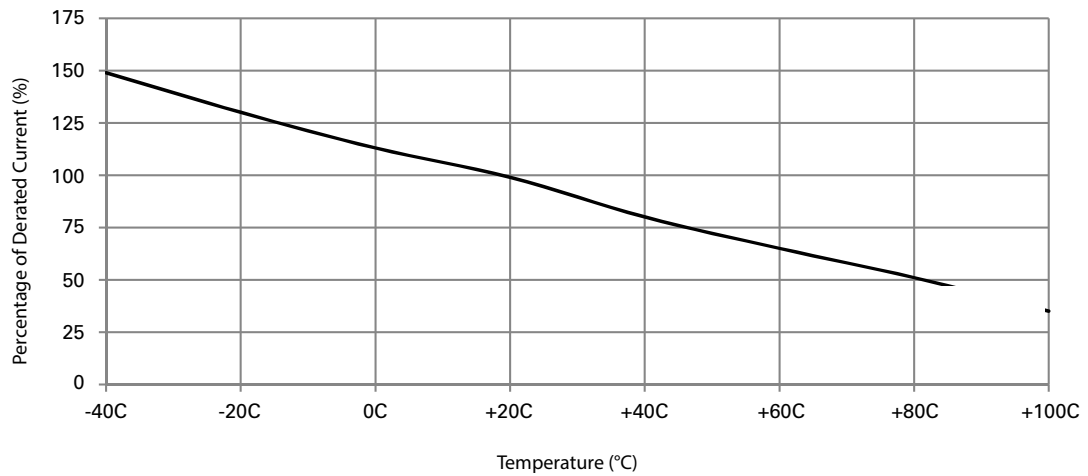
Recommended pad layout—mm



Time to trip curves at +23°C



Temperature derating curve



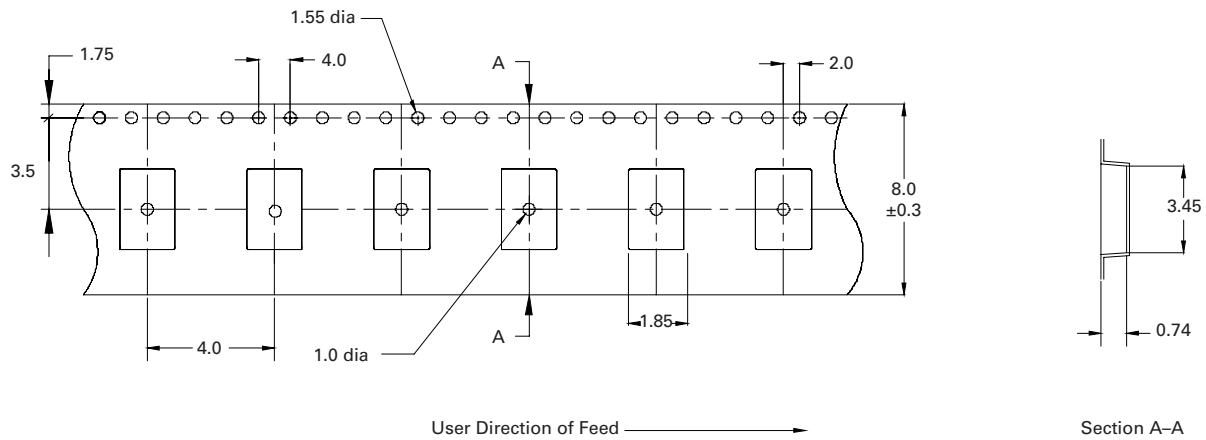
General specifications

| |
|---|
| Operating temperature: -40 °C to + 85 °C (with derating) |
| Storage temperature: -10 °C to + 40 °C |
| Storage relative humidity: 75% |
| Storage condition: Keep away from corrosive atmosphere and sunlight |
| Storage duration: 1 year |
| Thermal shock: (20 cycles - 40 °C to + 85 °C) -33% typical resistance change |
| Humidity: +85 °C, 85% relative humidity, 1000 hours ±5% typical resistance change |
| Resistance to solvents: MIL-STD- 202 Method 215 |

Packaging information-mm

Supplied in tape and reel packaging, 5000 parts per 7.0" diameter reel (EIA-481 compliant)

PTS120630V012, PTS120630V016, PTS120624V020, PTS120616V025, PTS120616V035, PTS12066V050, PTS12066V075, PTS120660V005, PTS120660V010, PTS12066V100, PTS12066V110



Supplied in tape and reel packaging, 2500 parts per 7.0" diameter reel (EIA-481 compliant)

PTS120615V050, PTS12066V150, PTS12066V200

