

# MURS320-360

## ULTRAFAST RECTIFIERS

### Features

- High reliability
- Low leakage
- Low forward voltage
- High current capability
- Ultrafast switching speed
- High surge capability
- Good for switching mode circuit
- RoHS compliant package

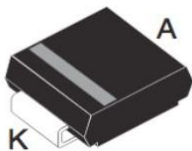
### Mechanical Data

- Epoxy: UL94V-O rate flame retardant
- Lead: Lead Formed for Surface Mount
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.229 gram

Package type : SMC

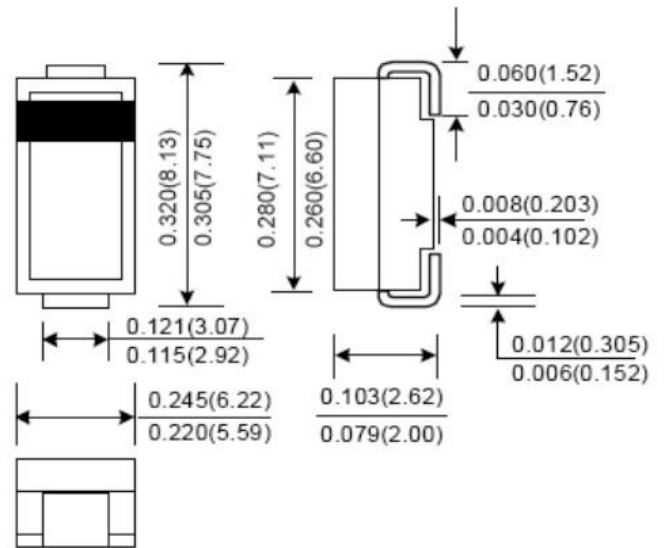
### Packing & Order Information

3,000/Reel



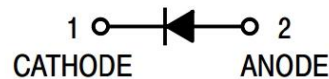
**RoHS  
COMPLIANT**

### SMC (DO-214AB)



Dimensions in inches and (millimeter)

Graphic symbol



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (Tc=25°C unless otherwise noted)

| Parameter  | Symbol             | MURS320 | MURS340 | MURS360 | Unit |
|--|--------------------|---------|---------|---------|------|
| Maximum repetitive peak reverse voltage  | V <sub>RRM</sub>   | 200     | 400     | 600     | V    |
| Working peak reverse voltage   | V <sub>RMS</sub>   | 140     | 280     | 420     | V    |
| Maximum DC blocking voltage  | V <sub>DC</sub>    | 200     | 400     | 600     | V    |
| Maximum average forward rectified current  | I <sub>O(AV)</sub> | 3.0     |         |         | A    |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on IFSM<br>40.0 Amps<br>rated load (JEDEC Method) | I <sub>FSM</sub>   | 75      |         |         | A    |

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#### Maximum Ratings (Tc=25°C unless otherwise noted)

| Parameter   | Symbol                           | MURS 320    | MURS 340 | MURS 360 | Unit |
|---|----------------------------------|-------------|----------|----------|------|
| Maximum instantaneous forward voltage at 3.0A DC                            | V <sub>F</sub>                   | 0.9         | 1.3      |          | V    |
| Maximum DC reverse current TA=25°C<br>at rated DC blocking voltage TA=125°C | I <sub>R</sub>                   | 5.0         | 5.0      | 100.0    | μA   |
|   |                                  | 5.0         | 5.0      | 100.0    |      |
| Typical junction capacitance (NOTE1)  | C <sub>J</sub>                   | 15          |          |          | pF   |
| Typical reverse recovery time (NOTE2)                                       | T <sub>RR</sub>                  | 35          | 75       |          | ns   |
| Typical thermal resistance (NOTE3)  | R <sub>θJA</sub>                 | 75          |          |          | V    |
| Operating junction and storage temperature range                            | T <sub>J</sub> ,T <sub>STG</sub> | -55 to +150 |          |          | °C/W |

#### Notes

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
- (2) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A
- (3) Thermal resistance from junction to ambient

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#### ■ Ratings and Characteristic Curves

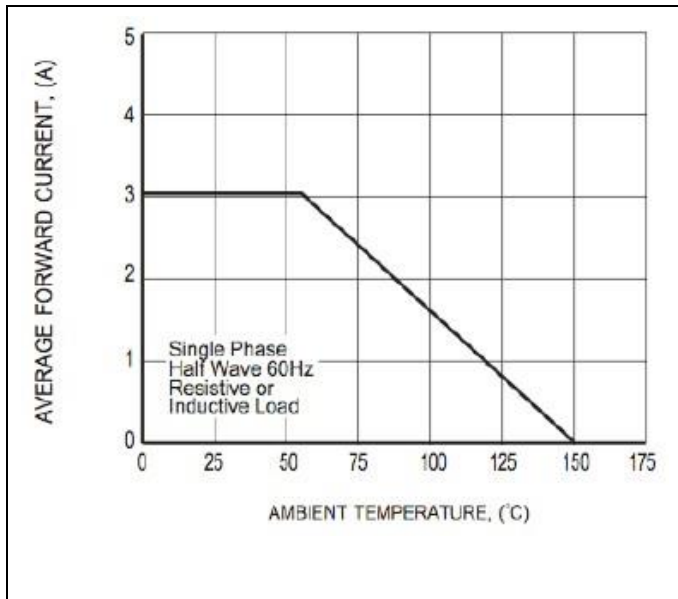


FIG.1- FORWARD DERATING CURVE

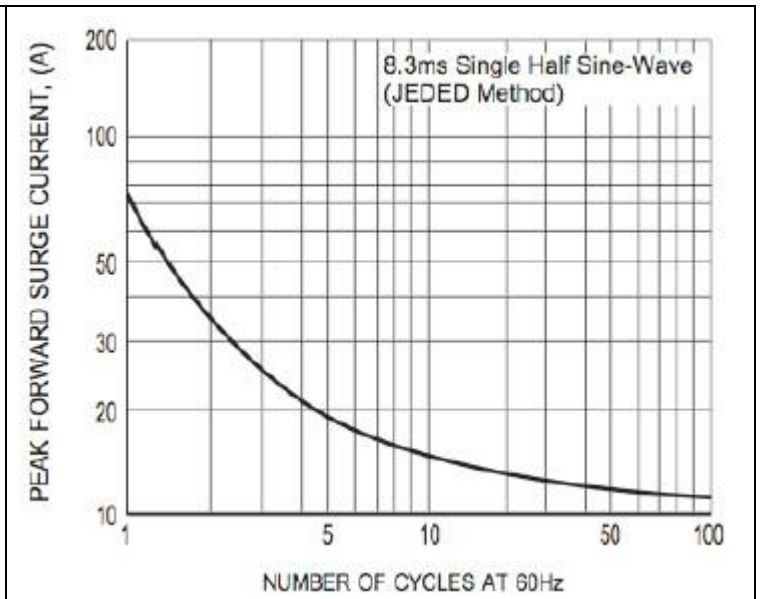


FIG.2- PEAK FORWARD SURGE CURRENT

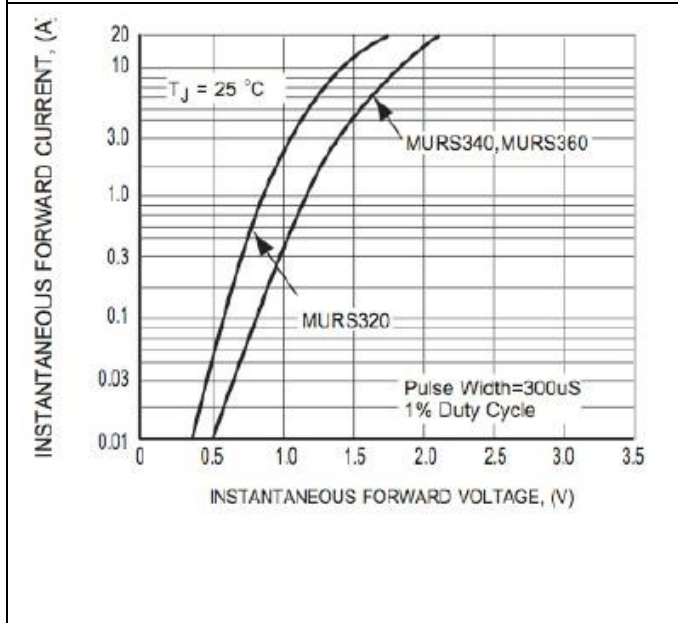


FIG.3- TYPICAL FORWARD CHARACTERISTICS

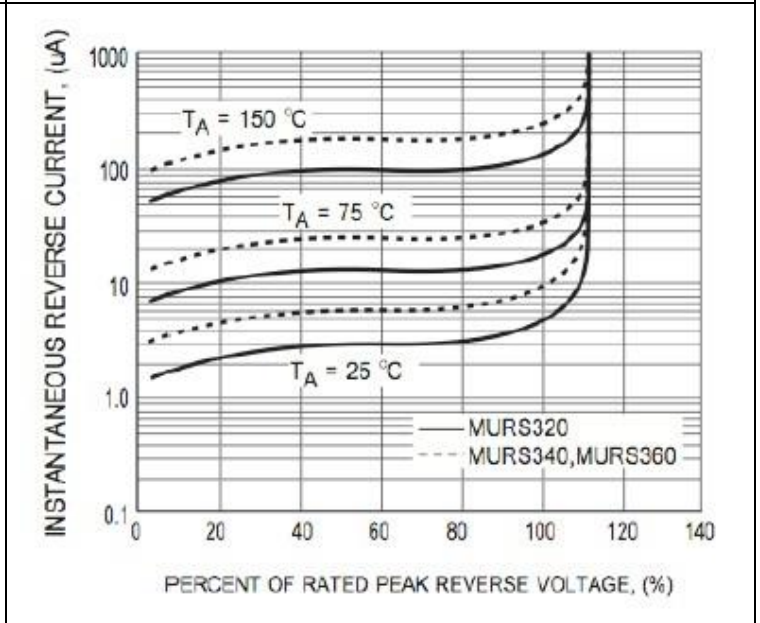


FIG.4- TYPICAL REVERSE CHARACTERISTICS

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