

# FR2005G~FR2040G

## SUPERFAST RECOVERY RECTIFIER

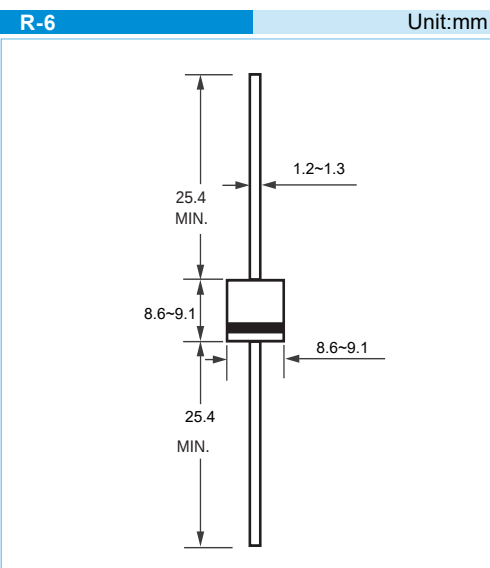
|                |                       |                |                  |
|----------------|-----------------------|----------------|------------------|
| <b>VOLTAGE</b> | <b>50 to 400 Volt</b> | <b>CURRENT</b> | <b>20 Ampere</b> |
|----------------|-----------------------|----------------|------------------|

### FEATURES

- Superfast recovery times-epitaxial construction.
- High surge capability.
- Lead free in compliance with EU RoHS

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



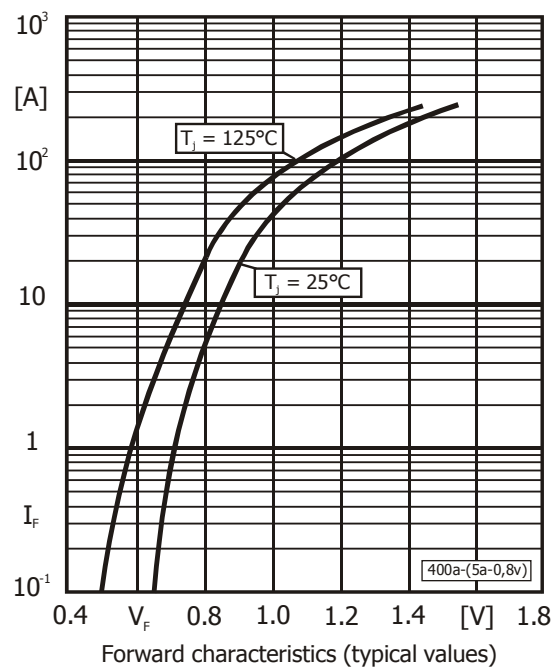
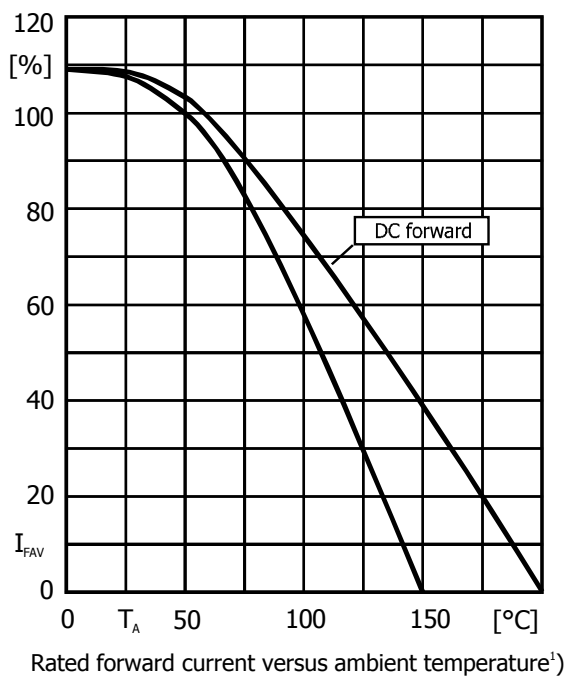
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER                                                                                          | SYMBOL         | FR2005G      | FR2010G | FR2020G | FR2040G | UNITS       |
|----------------------------------------------------------------------------------------------------|----------------|--------------|---------|---------|---------|-------------|
| Maximum Recurrent Peak Reverse Voltage                                                             | $V_{RRM}$      | 50           | 100     | 200     | 400     | V           |
| Maximum RMS Voltage                                                                                | $V_{RMS}$      | 35           | 70      | 140     | 280     | V           |
| Maximum DC Blocking Voltage                                                                        | $V_{DC}$       | 50           | 100     | 200     | 400     | V           |
| Maximum Average Forward Current at $T_a=50^{\circ}C$                                               | $I_{F(AV)}$    | 20           |         |         |         | A           |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load                 | $I_{FSM}$      | 375          |         |         |         | A           |
| Maximum Forward Voltage<br>$I_F=5A$<br>$I_F=20A$                                                   | $V_F$          | 0.82<br>0.94 |         |         |         | V           |
| Maximum DC Reverse Current at Rated DC Blocking Voltage<br>$T_J=25^{\circ}C$<br>$T_J=100^{\circ}C$ | $I_R$          | 25<br>200    |         |         |         | $\mu A$     |
| Maximum Reverse Recovery Time                                                                      | $t_{rr}$       | 200          |         |         |         | ns          |
| Operating Junction and Storage Temperature Range                                                   | $T_J, T_{STG}$ | -55 to +150  |         |         |         | $^{\circ}C$ |

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### RATING AND CHARACTERISTIC CURVES



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### ORDER INFORMATION

- Packing information

| Part Number     | Case | DELIVERY MODE | QUANTITY |
|-----------------|------|---------------|----------|
| FR2005G~FR2040G | R-6  | 13 Inch       | 500      |