

R1200 THRU R2000

HIGH VOLTAGE RECTIFIER

VOLTAGE RANGE 1200 to 2000 Volts CURRENT 1.0 Ampere

FEATURES

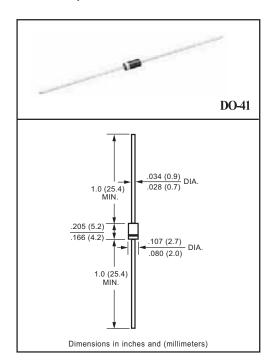
- *Fast switching
- *Low leakage
- *High current capability
- *High surge capability
- *High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25\,^{\circ}\text{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | R1200 | R1500 | R1800 | R2000 | UNITS |
|--|------------------|--------------|-------|-------|-------|------------------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 1200 | 1500 | 1800 | 2000 | Volts |
| Maximum RMS Volts | VRMS | 840 | 1050 | 1260 | 1400 | Volts |
| Maximum DC Blocking Voltage | VDC | 1200 | 1500 | 1800 | 2000 | Volts |
| Maximum Average Forward Rectified Current at TA = 50°C | lo | 1.0 | | | | Amps |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 30 | | | | Amps |
| Typical Current Squared Time | I ² t | 3.74 | | | | A ² S |
| Operating and Storage Temperature Range | TJ, TSTG | -65 to + 175 | | | | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| <u> </u> | <u>'</u> | | | | | | |
|---|----------|-------|-------|-------|-------|-------|--|
| CHARACTERISTICS | SYMBOL | R1200 | R1500 | R1800 | R2000 | UNITS | |
| Maximum Instantaneous Forward Voltage at 1.0A DC | VF | 1.1 | | 1.3 | | Volts | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C | | | | | 5.0 | | |
| Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at TL = 55°C | | 100 | | | | uAmps | |

NOTES: 1. ROHS compliant

2. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2019-10/25

REV:B

RATING AND CHARACTERISTIC CURVES (R1200 THRU R2000)

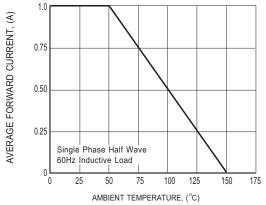


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

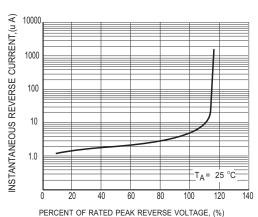


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

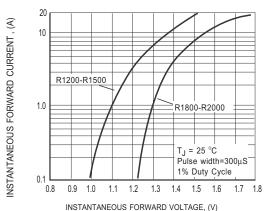


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

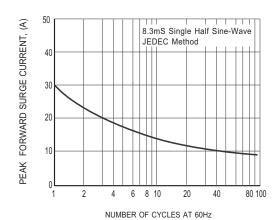
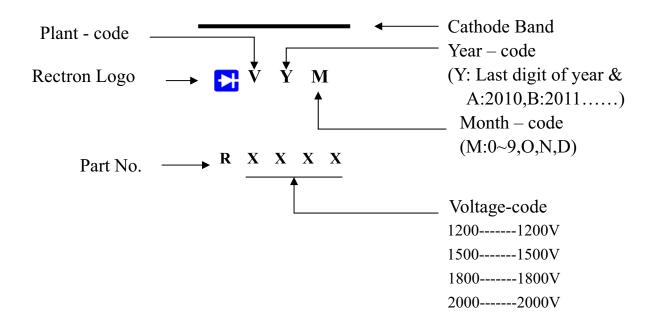


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|------------|---------------------|------------------|---------------|---------------------|
| DO-41 | -B | 1,000 | 194*75*21 | 415*220*255 | 50,000 | 16.2 |

REEL PACK

| PACKAGE | PACKING CODE | EA PER REEL | EA PER INNER BOX | COMPONENT SPACE (mm) | TAPE SPACE (mm) | REEL DIA (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|-----------------|----------------|------------------------|----------------------------|--------------------|------------------|---------------------|------------------|---------------------|
| DO-41 | -T | 5,000 | 5,000 | 5.0 | 52 | 330 | 355*350*335 | 20,000 | 10.49 |

AMMO PACK

| PACKAGE | PACKING CODE | REEL (EA) | COMPONENT SPACE(mm) | TAPE SPACE (mm) | BOX SIZE (mm) | CARTON SIZE(mm) | CARTON (EA) | GROSS WEIGHT (Kg) |
|---------|-----------------|--------------|------------------------|-----------------|------------------|--------------------|----------------|----------------------|
| DO-41 | -F | 3,000 | 5.0 | 52 | 255*73*100 | 400*268*225 | 30,000 | 13.0 |
| DO-41 | -E | 3,000 | 5.0 | 26 | 256*48*94 | 365*270*217 | 42,000 | 12.41 |



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