

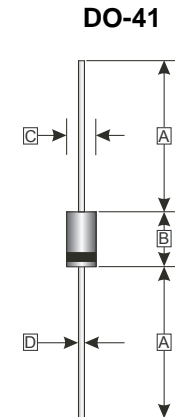
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Guard ring for overvoltage protection
- Very small conduction losses
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

## MECHANICAL DATA

- Cases: DO-41
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free plating (Tin finish)  
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Weight: 0.318 grams (approximately)



| REF. | Millimeter |      |
|------|------------|------|
|      | Min.       | Max. |
| A    | 25.4 (TYP) |      |
| B    | 4.10       | 5.21 |
| C    | 2.00       | 2.72 |
| D    | 0.70       | 0.90 |

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

| Parameter  | Symbol          | Rating             | Unit |
|--|-----------------|--------------------|------|
| Maximum Repetitive Peak Reverse Voltage                              | $V_{RRM}$       | 150                | V    |
| Maximum RMS Voltage  | $V_{RMS}$       | 105                | V    |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 150                | V    |
| Maximum Average Forward Rectified Current                            | $I_F$           | 1                  | A    |
| Peak Forward Current @ 8.3 ms Half Sine                              | $I_{FSM}$       | 30                 | A    |
| Maximum Instantaneous Forward Voltage @ 1.0A                         | $V_F$           | 0.87               | V    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>3</sup> | $I_R$           | $T_A=25^{\circ}C$  | 0.2  |
|  |                 | $T_A=100^{\circ}C$ | 2    |
| Typical Junction Capacitance <sup>1</sup>                            | $C_J$           | 30                 | pF   |
| Typical Thermal Resistance <sup>2</sup>                              | $R_{\theta JA}$ | 70                 | °C/W |
| Operating & Storage Temperature                                      | $T_J, T_{STG}$  | -55~150            | °C   |

Notes:

1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Thermal Resistance Junction to Ambient.
3. Pulse test: 300us pulse width, 1% duty cycle

**RATINGS AND CHARACTERISTIC CURVES**

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

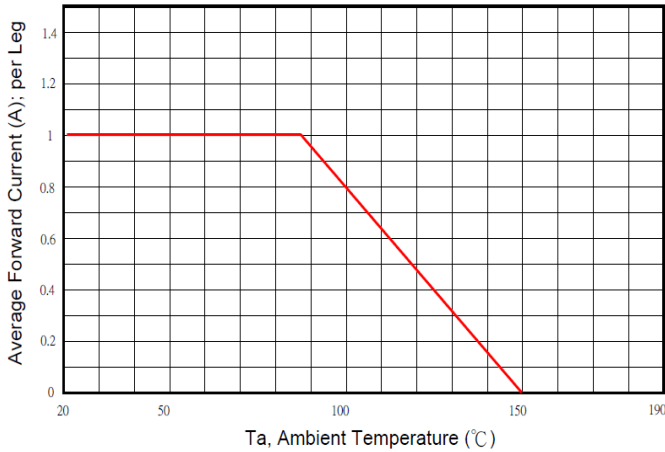


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

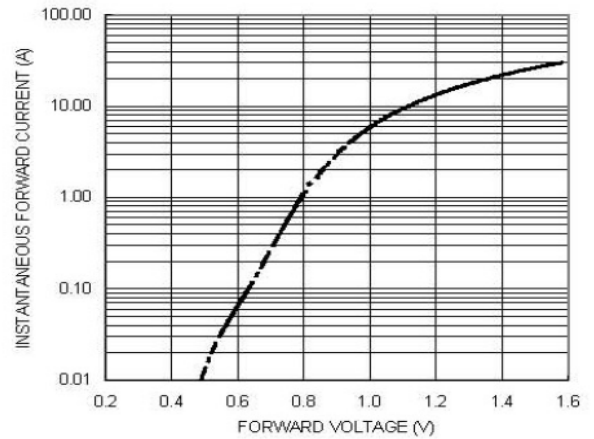


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

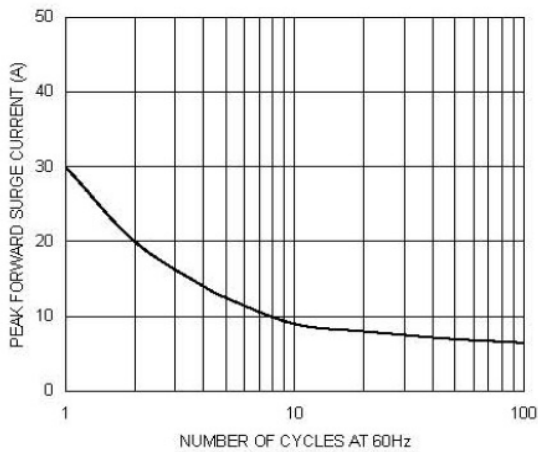


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

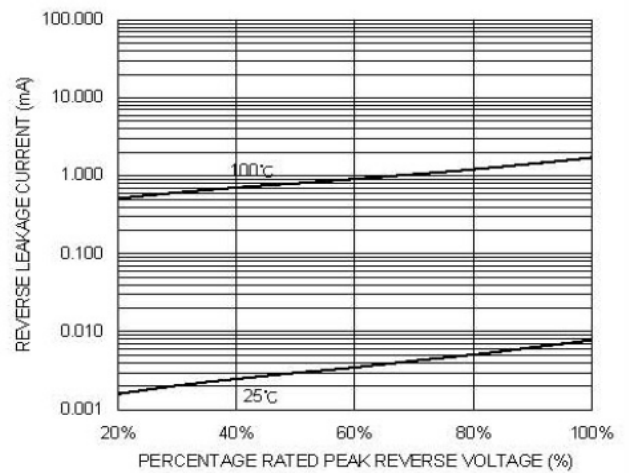


FIG. 5-TYPICAL JUNCTION CAPACITANCE

