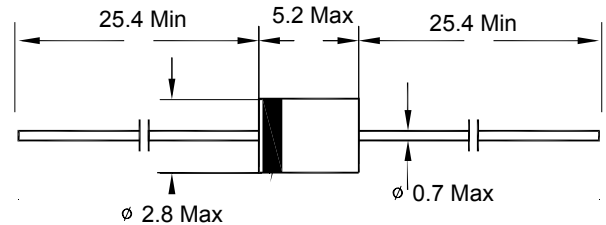


GENERAL PURPOSE PLASTIC RECTIFIER

FEATURES

- Low reverse leakage
- High current capability
- High reliability
- High surge current capability
- Exceeds environmental standards of MIL-S-19500/228
- In compliance with EU RoHS 2002/95/EC directives

1N4001---1N4007



DO-41 Dimensions in millimeters

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012 ounce, 0.33 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified, Single Phase, half wave, 60Hz, resistive or inductive load, For capacitive load derate current by 20%

	SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length at T _A = 25 °C	I _(AV)	1.0							A
Peak Forward Surge Current, 8.3mS single half sine wave superimposed on, rated load (JEDEC method)	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.0							V
Maximum DC Reverse Current at Rated	I _R	5.0							μA
DC Blocking Voltage per element									
Maximum Full Load Reverse Current, full cycle average , 0.375"(9.5mm)lead length at T _L =75 °C	I _{R(AV)}	30							μA
Typical Junction Capacitance (Note 1)	C _J	14							pF
Typical Thermal Resistance (Note 2)	R _{JA}	50							°C/W
Operating Junction Temperature Range	T _J	-55-150							°C
Storage Temperature Range	T _{STG}	-55-150							°C

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to terminal 6.0mm² copper pads to each terminal.
3. The chip size is 40mil×40mil

1N4001---1N4007 Typical Characteristics

