



CHENMKO ENTERPRISE CO.,LTD

SILICON RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.0 Ampere

**1N4001PT
THRU
1N4007PT**

Lead free devices

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

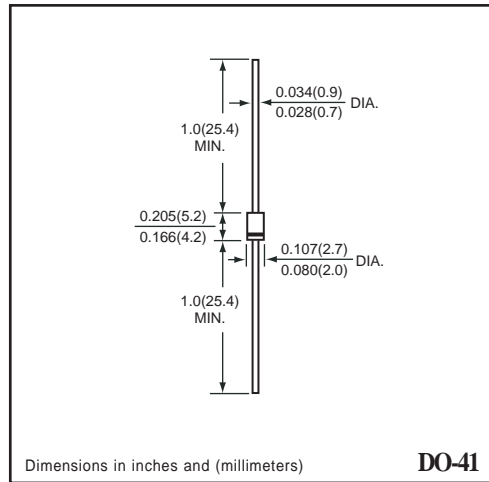
Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.33 gram



DO-41



DO-41

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°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	1N4001PT	1N4002PT	1N4003PT	1N4004PT	1N4005PT	1N4006PT	1N4007PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	I _o	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30							Amps
Typical Junction Capacitance (Note)	C _J	15							pF
Typical Thermal Resistance	R _{θJA}	50							°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

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

CHARACTERISTICS	SYMBOL	1N4001PT	1N4002PT	1N4003PT	1N4004PT	1N4005PT	1N4006PT	1N4007PT	UNITS	
Maximum Instantaneous Forward Voltage at 1.0 A DC	V _F	1.1							Volts	
Maximum Reverse Current at rated	I _R	50							@ TA = 25°C	uAmps
DC blocking Voltage per leg									@ TA = 100°C	uAmps
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TL = 75°C									30	uAmps

NOTES : Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

2001-6

RATING CHARACTERISTIC CURVES (1N4001PT THRU 1N4007PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

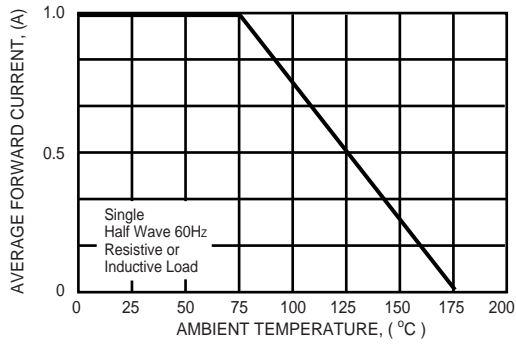


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

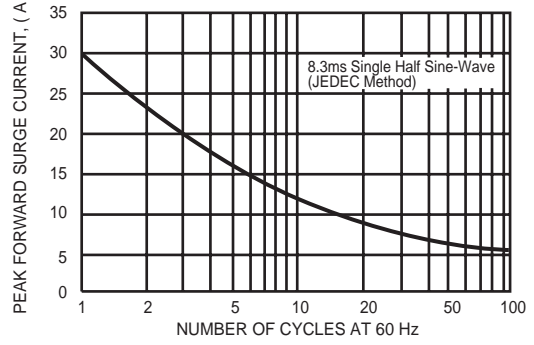


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

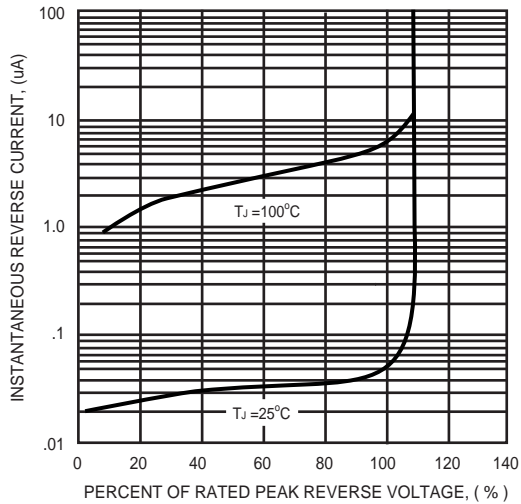


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

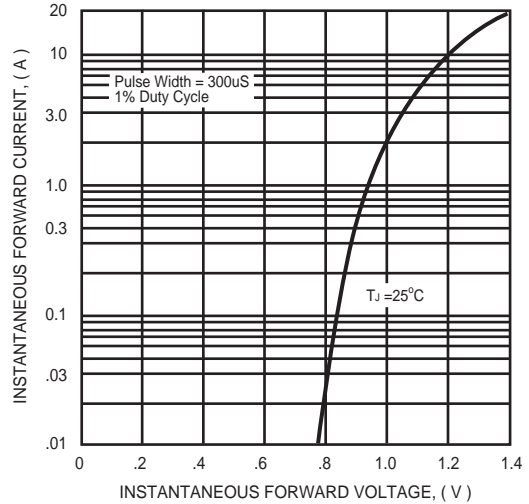


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

