



# CHENMKO ENTERPRISE CO.,LTD

**1N4001PT  
THRU  
1N4007PT**

## SILICON RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.0 Ampere

Lead free devices

### FEATURES

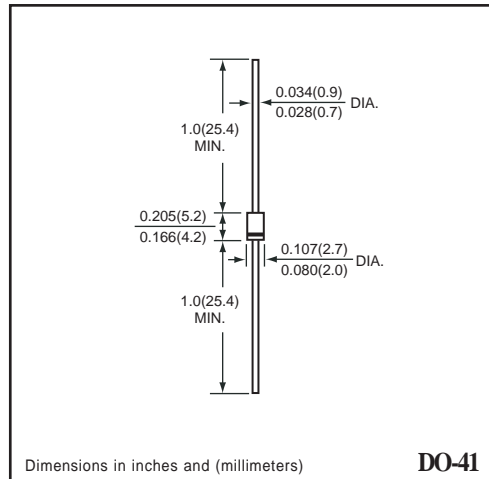
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

### 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	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	Io	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							Amps
Typical Junction Capacitance ( Note )	CJ	15							pF
Typical Thermal Resistance	R θ JA	50							°C / W
Operating and Storage Temperature Range	TJ, TSTG	-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	VF	1.1							Volts	
Maximum Reverse Current at rated	IR	5.0							@ 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	

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

# RATING CHARACTERISTIC CURVES ( 1N4001PT THRU 1N4007PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

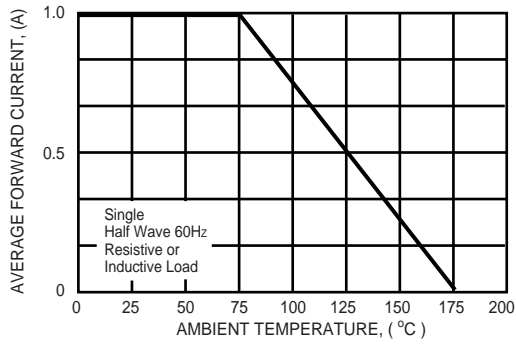


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

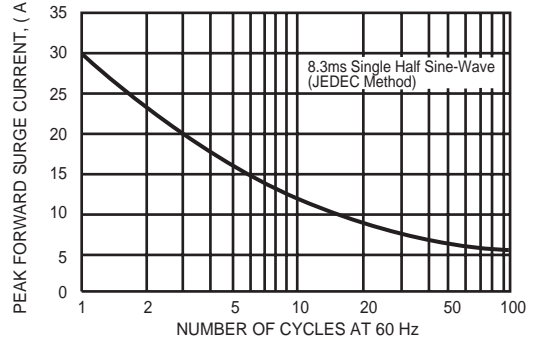


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

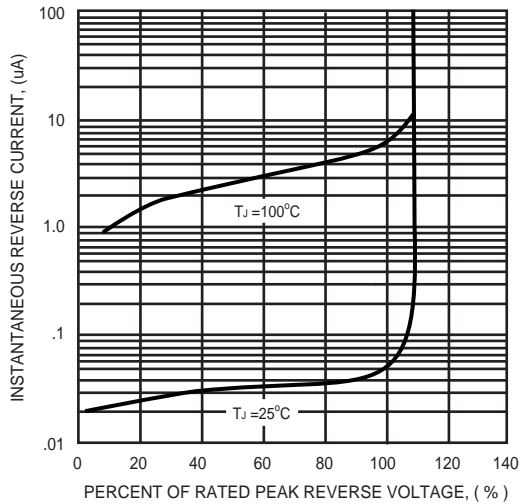


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

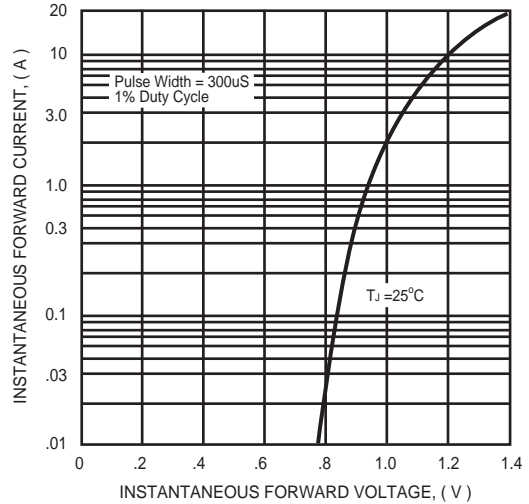


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

