



# CHENMKO ENTERPRISE CO.,LTD

## SILICON RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.5 Amperes

**J05PT  
THRU  
J10PT**

Lead free devices

### FEATURES

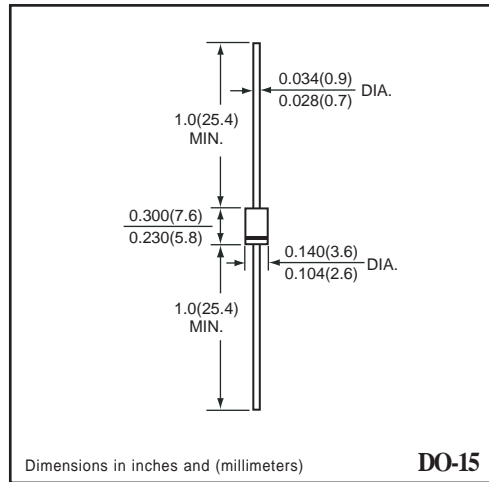
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

### MECHANICAL DATA

**Case:** JEDEC DO-15 molded plastic  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.38 gram



DO-15



DO-15

### 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	J05PT	J1PT	J2PT	J4PT	J6PT	J8PT	J10PT	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 0.375" (9.5mm) lead length at TA = 75°C	Io	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	60							Amps
Typical Junction Capacitance ( Note )	CJ	20							pF
Typical Thermal Resistance	R θJA	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	J05PT	J1PT	J2PT	J4PT	J6PT	J8PT	J10PT	UNITS
Maximum Instantaneous Forward Voltage at 1.5 A DC	VF	1.0							Volts
Maximum Reverse Current at rated DC blocking Voltage per leg	IR	5.0							uAmps
		50							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 ( J05PT THRU J10PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

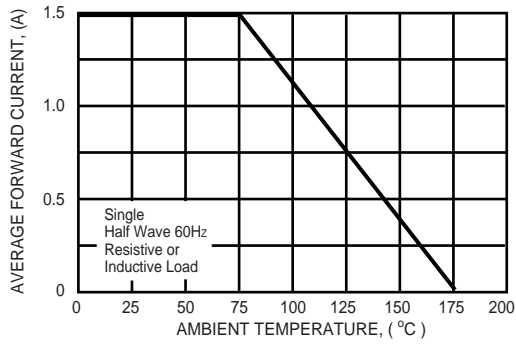


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

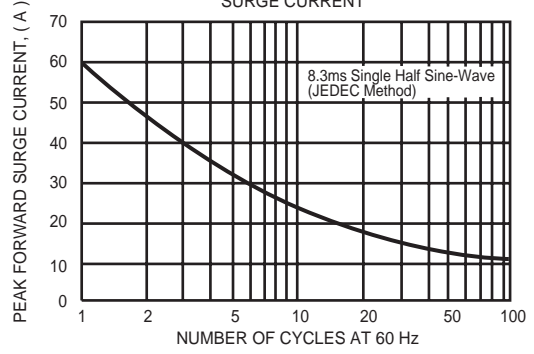


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

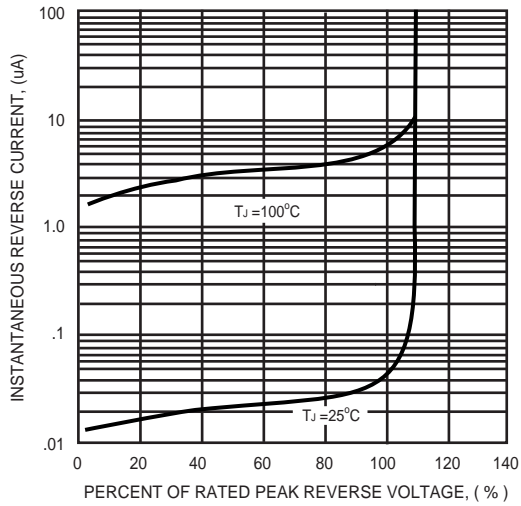


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

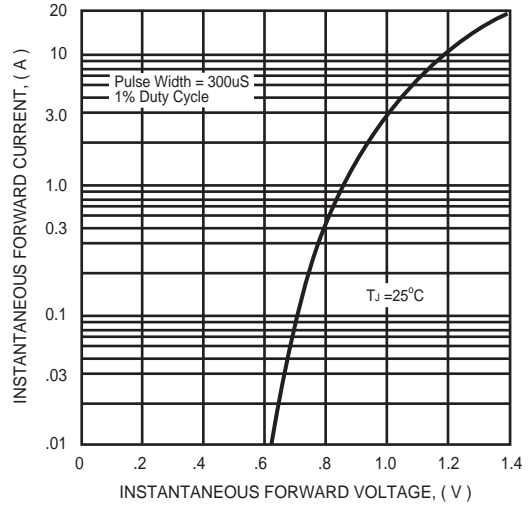


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

