

## CHENMKO ENTERPRISE CO.,LTD

### SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER VOLTAGE RANGE 20 - 40 Volts CURRENT 3.0 Ampere SMD32PT **THRU** SMD34PT

#### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
  High temperature soldering guaranteed:
  260°C/10 seconds at terminals

#### **MECHANICAL DATA**

Case: JEDEC SOD-123 molded plastic

Terminals: Solder plated, solderable per MIL-STD-750,

Method 2026

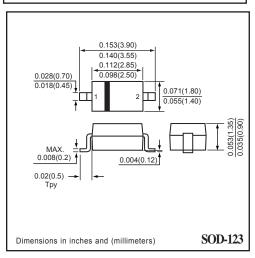
Polarity: Color band denotes cathode end Weight: 0.001 ounce 0.032 gram

#### 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%.

# SOD-123



#### MAXIMUM RATINGES ( At TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	SMD32PT	SMD33PT	SMD34PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	Volts
Maximum RMS Voltage	VRMS	14	21	28	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	Volts
Maximum Average Forward Rectified Current at TL = 45°C	lo	3.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) $TL = 45^{\circ}C$	IFSM	40			Amps
Typical Junction Capacitance (Note 2)	CJ	210			pF
Typical Thermal Resistance (Note 1)	R θ JL	80			°C/W
Storage and Operating Temperature Range	ТJ, Tsтg	-65 to +125			°C

#### **ELECTRICAL CHARACTERISTICS** ( At TA = $25^{\circ}$ C unless otherwise noted )

SM	D23F	PΤ

CHARACTERISTICS		SYMBOL	SMD32PT	SMD33PT	SMD34PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC		VF	0.85	0.9	1.0	Volts
Maximum Average Reverse Current	@ Ta = 25°C	- IR	1.0		mAmps	
at Rated DC Blocking Voltage	@ Ta = 100°C		10			mAmps

NOTES: 1. Thermal Resistance ( Junction to Lead ): PC Board Mounted on 0.2 X 0.2" ( 5 X 5mm ) copper pad area.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

2007-01

