



### SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### **Features**

- Low Forward Voltage Drop
- Guard Ring Die Construction for Transient Protection
- Ideal for Low Logic Level Applications
- Low Capacitance
- Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device (Notes 2 and 3)

## **Mechanical Data**

- Case: SOD-323
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Leads: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Polarity: Cathode Band
- Marking Information: See Page 3
- Ordering Information: See Page 3
- Weight: 0.004 grams (approximate)



Top View

#### Maximum Ratings @T<sub>A</sub> = 25°C unless otherwise specified Characteristic Symbol Value Unit Peak Repetitive Reverse Voltage V<sub>RRM</sub> Working Peak Reverse Voltage 40 V V<sub>RWM</sub> DC Blocking Voltage $V_R$ **RMS Reverse Voltage** V<sub>R(RMS)</sub> 28 V Maximum (Peak) Forward Current 30 mΑ I<sub>FM</sub> Non-Repetitive Peak Forward Surge Current @8.3ms Single half sine-wave superimposed on rated load 200 mΑ IFSM (JEDEC method)

# **Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation	PD	160	mW
Thermal Resistance, Junction to Ambient Air	R <sub>0</sub> JA	625	°C/W
Operating and Storage Temperature Range	T <sub>J,</sub> T <sub>STG</sub>	-40 to +125	۵°

# Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	V <sub>(BR)R</sub>	40	_	_	V	I <sub>R =</sub> 10uA
Forward Voltage Drop	VF	_	290	370	mV	I <sub>F</sub> = 1mA
Leakage Current (Note 1)	IR	_	0.20	0.5	μΑ	V <sub>R</sub> = 30V
Total Capacitance	Ст	_	2		pF	$V_R = 1V$ f = 1.0 MHz

Notes:

1. Short duration pulse test used to minimize self-heating effect.

2.

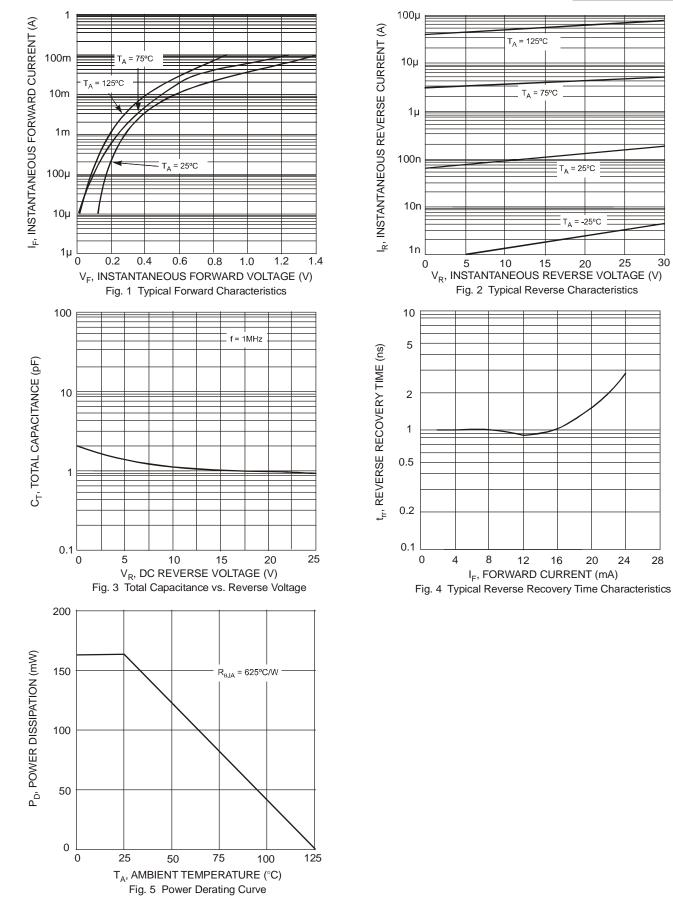
No purposefully added lead. Halogen and Antimony Free. Product manufactured with Data Code V9 (week 33, 2008) and newer are built with Green Molding Compound. Products manufactured prior to Date 3. Code V9 are built with Non-Green Molding Compound and may contain Halogens or Sb<sub>2</sub>O<sub>3</sub> Fire Retardants.



# SDMK0340L

30

28





## Ordering Information (Note 4)

Device	Packaging	Shipping
SDMK0340L-7-F	SOD-323	3000/Tape & Reel

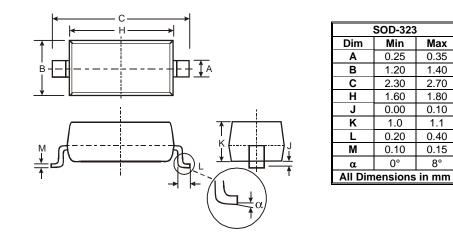
Notes: 4. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

### **Marking Information**

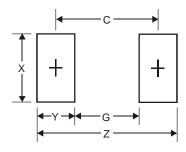


SR = Product Type Marking Code

# **Package Outline Dimensions**



# **Suggested Pad Layout**



Dimensions	Value (in mm)
Z	3.75
G	1.05
х	0.65
Y	1.35
С	2.40

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