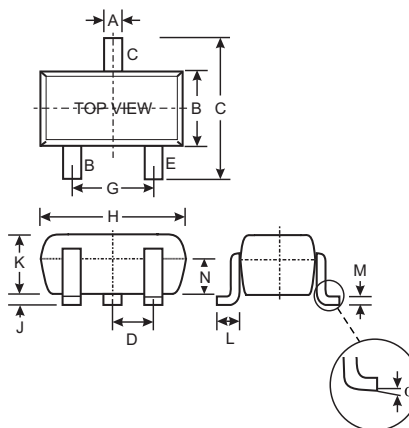


### Features

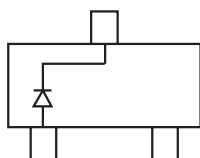
- Low Forward Voltage Drop
- Guard Ring Die Construction for Transient Protection
- Ideal for low logic level applications
- Low Capacitance
- **Lead Free/RoHS Compliant (Note 3)**

### Mechanical Data

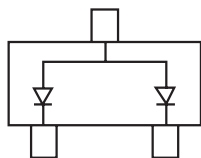
- Case: SOT-523
- Case Material: Molded Plastic. UL Flammability Classification Rating: 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Polarity: See Diagrams Below
- Marking: See Diagrams Below & Page 3
- Weight: 0.002 grams (approx.)
- Ordering Information, see Page 3



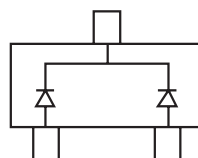
SOT-523			
Dim	Min	Max	Typ
A	0.15	0.30	0.22
B	0.75	0.85	0.80
C	1.45	1.75	1.60
D	—	—	0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
J	0.00	0.10	0.05
K	0.60	0.80	0.75
L	0.10	0.30	0.22
M	0.10	0.20	0.12
N	0.45	0.65	0.50
α	0°	8°	—
All Dimensions in mm			



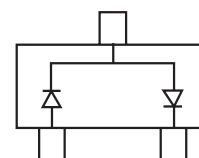
SDMP0340LT Marking: SM



SDMP0340LAT Marking: SQ



SDMP0340LCT Marking: SP



SDMP0340LST Marking: SN

### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	30	mA
Non-Repetitive Peak Forward Surge Current @8.3ms Single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200	mA
Power Dissipation (Note 1)	P <sub>d</sub>	150	mW
Thermal Resistance, Junction to Ambient (Note 1)	R <sub>θJA</sub>	833	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-40 to +125	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	40	—	—	V	I <sub>R</sub> = 10uA
Forward Voltage Drop	V <sub>F</sub>	—	290	370	mV	I <sub>F</sub> = 1mA
Leakage Current (Note 2)	I <sub>R</sub>	—	—	1.0	μA	V <sub>R</sub> = 10V
Total Capacitance	C <sub>T</sub>	—	2	—	pF	V <sub>R</sub> = 1V, f = 1.0 MHz

Notes: 1. Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.  
2. Short duration test pulse used to minimize self-heating effect.  
3. No purposefully added lead.

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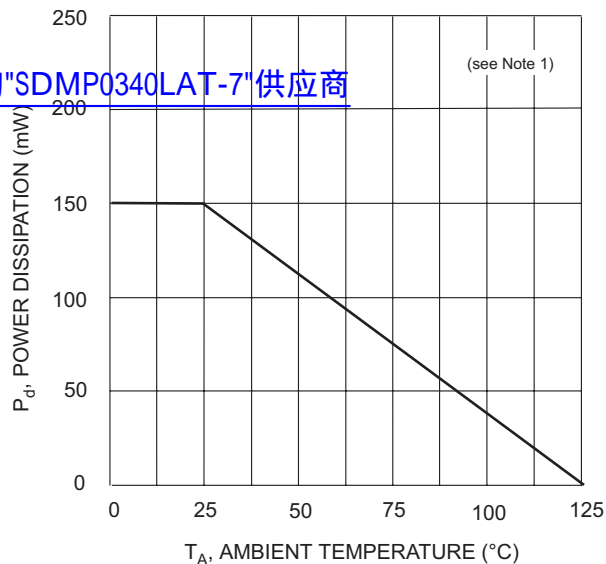


Fig. 1, Power Derating Curve

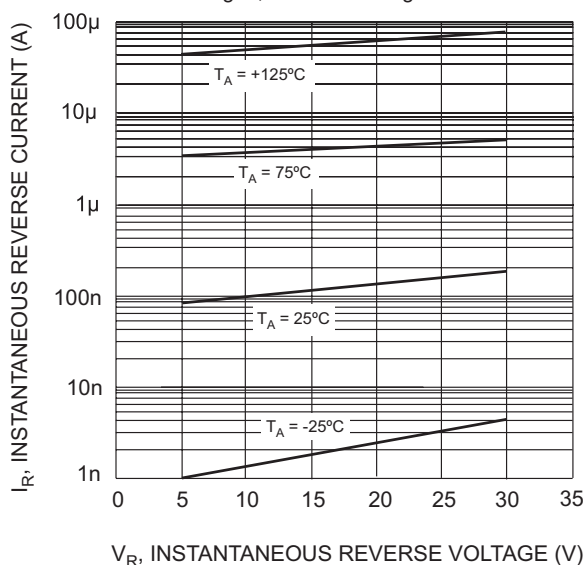


Fig. 3 Typical Reverse Characteristics

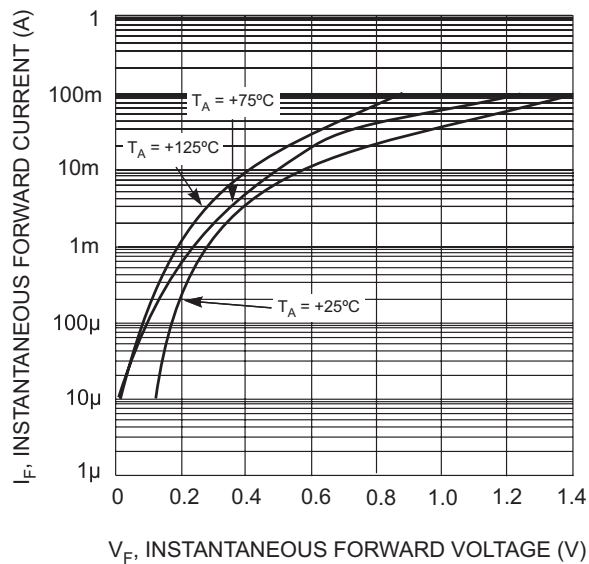


Fig. 2 Typical Forward Characteristics

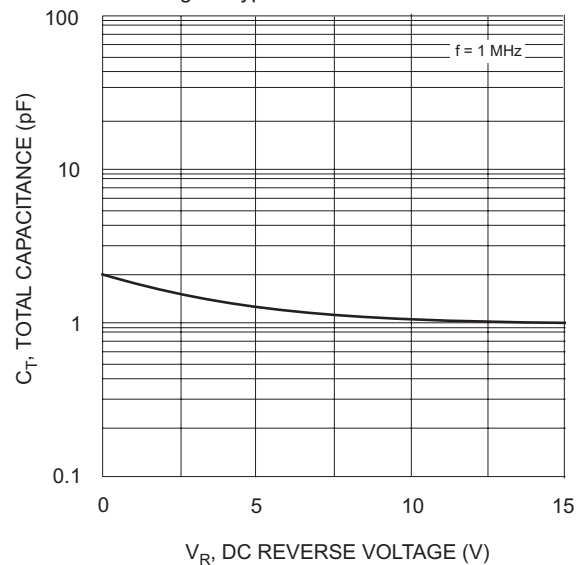


Fig. 4 Typical Capacitance vs. Reverse Voltage

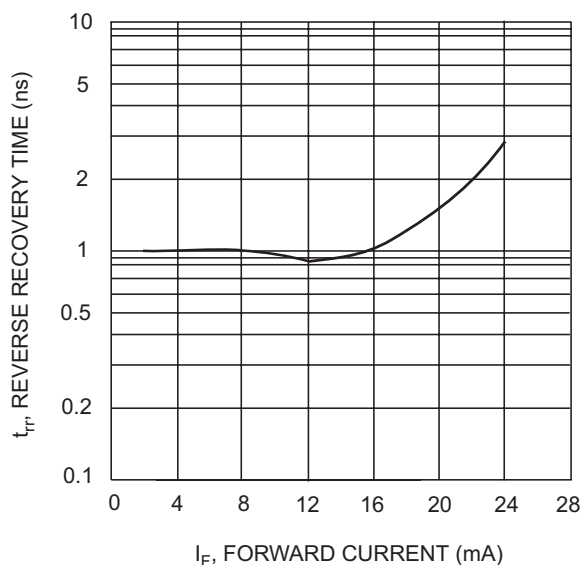


Fig. 5 Typical Reverse Recovery Time Characteristics

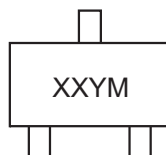
## Ordering Information (Note 4)

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Device	Packaging	Shipping
SDMP0340LT-7	SOT-523	3000/Tape & Reel
SDMP0340LST-7	SOT-523	3000/Tape & Reel
SDMP0340LCT-7	SOT-523	3000/Tape & Reel
SDMP0340LAT-7	SOT-523	3000/Tape & Reel

Notes: 4. For Packaging Details: go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

## Marking Information



XX = Product Type Marking Code (See Page 1)  
 YM = Date Code Marking  
 Y = Year (ex: N = 2002)  
 M = Month (ex: 9 = September)

Date Code Key

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	M	N	P	R	S	T	U	V	W	X	Y	Z

Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

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