



SDM20U30LP

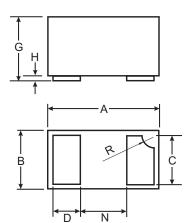
SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Capacitance
- Ultra-Small Surface Mount Package
- Lead Free By Design/RoHS Compliant (Note 1)
- "Green" Device (Note 2)
- Qualified to AEC-Q101 Standards for High Reliability

Mechanical Data

- Case: DFN1006-2
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminal Connections: Cathode Dot
- Terminals: Finish NiPdAu annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Marking Code: LM, Dot Denotes Cathode Side
- Ordering Information: See Last Page
- Weight: 0.001 grams



	DFN1006-2					
Dim	Min	Max	Тур			
Α	0.95	1.075	1.00			
В	0.55	0.675	0.60 0.50 0.25 0.50 0.03 0.40			
С	0.45	0.55				
D	0.20	0.30				
G	0.47	0.53				
Н	0	0.05				
N						
R	0.05	0.15	0.10			
All Dimensions in mm						

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		30	V
RMS Reverse Voltage	V _{R(RMS)}	21	V
Maximum (Peak) Forward Current	I _{FM}	200	mA
Peak Forward Surge Current 8.3ms Half Sine	I _{FSM}	1.0	Α
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +125	°C

Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation	Pd	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{ heta JA}$	400	°C/W

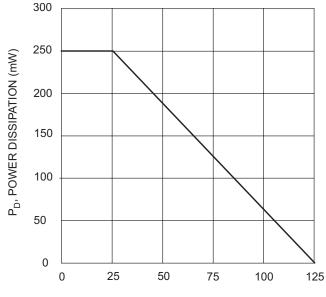
Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 3)	V _{(BR)R}	30	_	_	V	I _R = 150μA
Forward Voltage Drop	V _F	_	_	350 575	mV	I _F = 20mA I _F = 200mA
Peak Reverse Current (Note 3)	I _R	_	_	150 30	μ Α μ Α	V _R = 30V V _R = 10V
Total Capacitance	C _T	_	20	_	pF	V _R = 0V, f = 1.0MHz

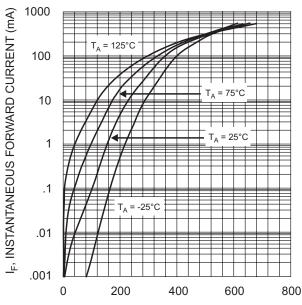
Note: 1. No purposefully added lead.

- 2. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com/products/lead_free/index.php.
- 3. Short duration pulse test used so as to minimize self-heating effect.

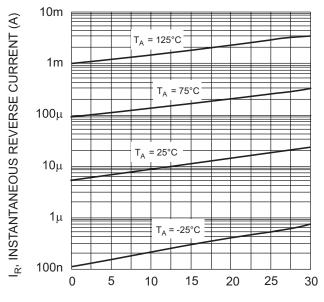




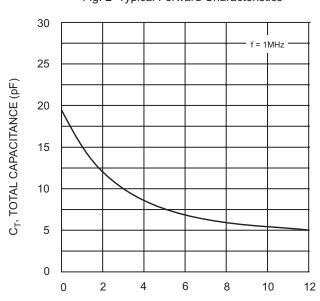
T_A, AMBIENT TEMPERATURE (°C) Fig. 1 Power Derating Curve



V_F, INSTANTANEOUS FORWARD VOLTAGE (mV) Fig. 2 Typical Forward Characteristics



V_R, INSTANTANEOUS REVERSE VOLTAGE (V) Fig. 3 Typical Reverse Characteristics



V_R, REVERSE VOLTAGE (V) Fig. 4 Typical Total Capacitance vs. Reverse Voltage

Ordering Information (Note 4)

Device	Packaging	Shipping	
SDM20U30LP-7	DFN1006-2	3000/Tape & Reel	

Note: 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



LM = Product Type Marking Code, Dot Denotes Cathode Side



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