



SDM6CC

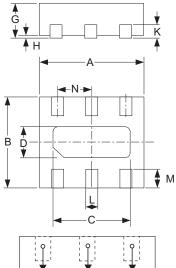
SIX ELEMENT COMMON - CATHODE SCHOTTKY ARRAY

Features

- Low Forward Voltage Drop
- Fast Switching
- Very High Density (Six diode Elements in a sub-miniature Package)
- Lead Free/RoHS Compliant (Note 2)
- "Green" Device (Note 3)

Mechanical Data

- Case: DFN1616-6
- 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 (NiPdAu Finish annealed over Copper leadframe).
- Polarity: Pin 1 Dot and Center Pad notch, See diagram
- Marking Code: ST (See Page 2)
- Weight: 0.004 grams (approximate)



DFN1616-6								
Dim	Min	Max	Тур					
Α	1.55	1.675	1.60					
В	1.55	1.675	1.60					
С	1.10	1.30	1.20					
D	0.30	0.50	0.40					
G	0.545	0.605	0.575					
Н	0	0.05	0.02					
K	_	_	0.13					
L	0.20	0.30	0.25					
М	0.275	0.375	0.325					
N	_	_	0.50					
All Dimensions in mm								

TOP VIEW SCHEMATIC

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	30	V
Forward Continuous Current	I _{FM}	200	mA
Non-Repetitive Peak Forward Surge Current @ t < 1.0s	I _{FSM}	625	mA
Power Dissipation (total package)	Pd	250	mW
Thermal Resistance Junction to Ambient Air	R ₀ JA	400	°C/W
Operating Temperature Range	Tj	-55 to +125	°C
Storage Temperature Range	T _{STG}	-65 to +125	°C

Electrical Characteristics @ TA = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	30	_	_	V	$I_R = 100 \mu A$
Forward Voltage	VF	_	260 — — 525	300 360 460 570	mV	I _F = 0.1mA I _F = 1.0mA I _F = 10mA I _F = 30mA
Reverse Current (Note 1)	I _R		25 30 35 100	125 150 500 700	nA nA nA nA	V _R = 1V V _R = 2V V _R = 5V V _R = 30V
Reverse Recovery Time		_	_	5.0	ns	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \text{ x } I_R, R_L = 100 \Omega$

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

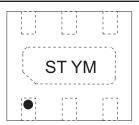
- 2. No purposefully added lead.
- 3. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com/products/lead_free/index.php.



Ordering Information

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			- 11 3	
	SDM6CC-7	DFN1616-6	3000/Tape & Reel	

Marking Information

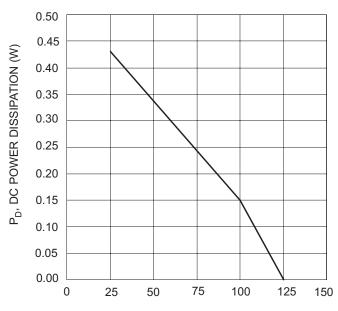


ST = Product Type Marking Code YM = Date Code Marking Y = Year ex: T = 2006 M = Month ex: 9 = September

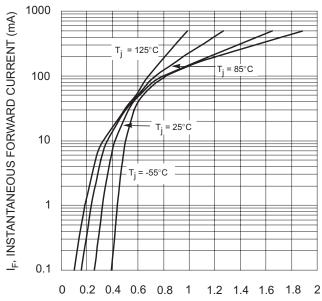
Date Code Key

Year	2006	2007	2008	2009	2010	2011	2012
Code	Т	U	V	W	X	Υ	Z

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	N	D



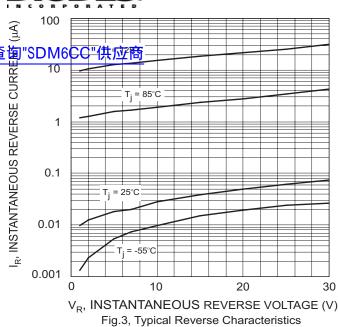
T_A, AMBIENT TEMPERATURE (°C) Fig. 1, Power Dissipation Derating

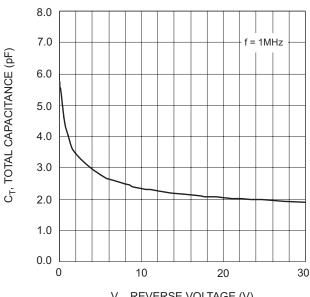


V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2, Typical Forward Characteristics



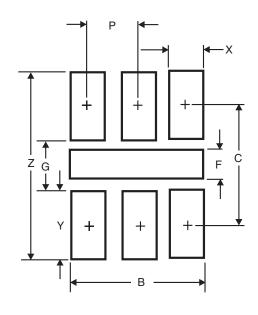
NEW PRODUCT





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

Suggested Pad Layout



Dimensions							
Dim	Inches Millim						
В	.051	1.30					
С	.060	1.52					
Р	.020	0.50					
F	.018	0.45					
G	.035	0.89					
Х	.012	0.30					
Υ	.025	0.63					
Z	.085	2.15					

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