

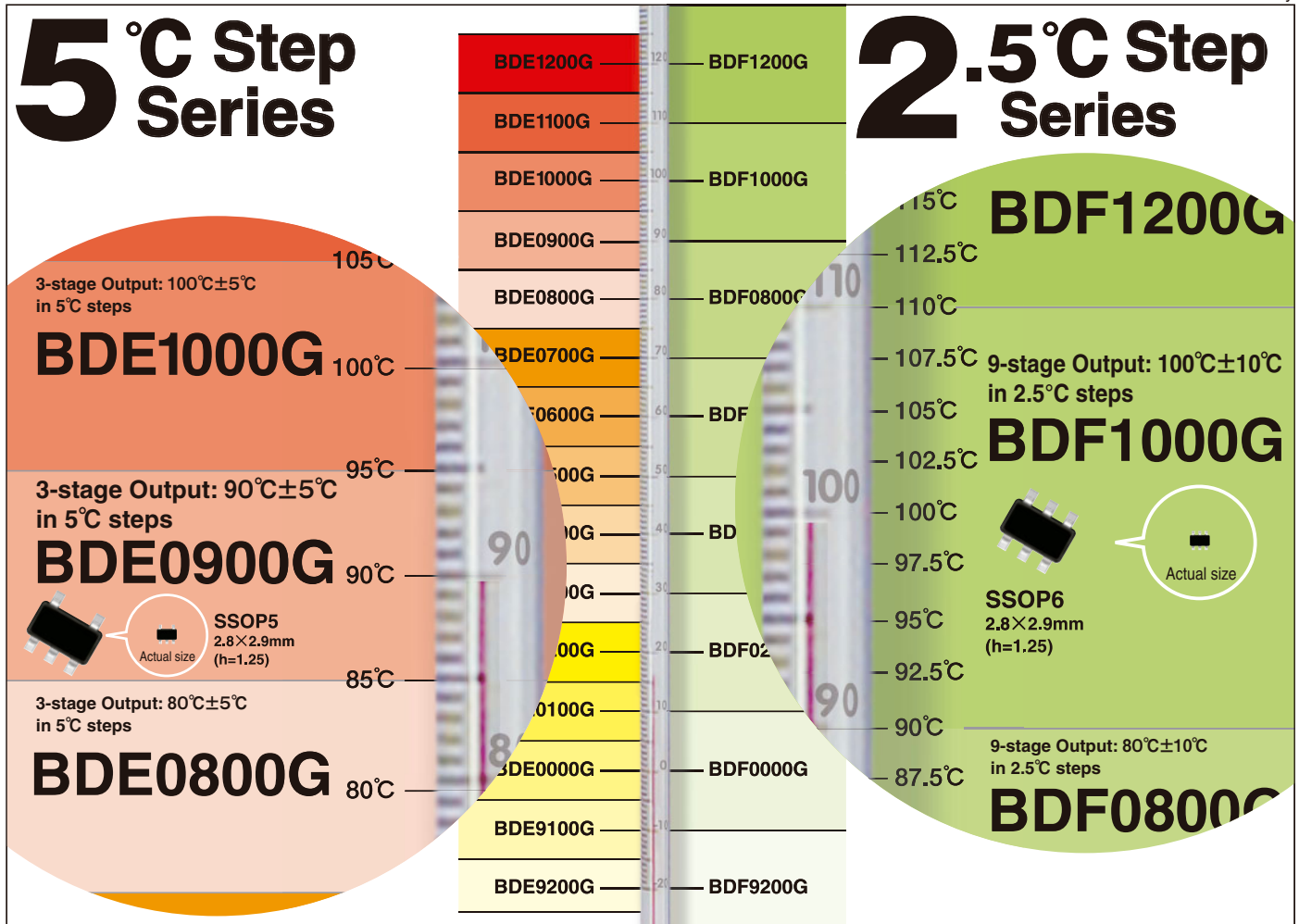


# Thermostat Output Type Temperature Sensor ICs



The industry's first\* sensor IC capable of detection temperature switching

\*October 2007 ROHM study



## Temperature Sensor ICs Thermostat Output Type (Open Drain, Low Active)

**5°C Step BDE□□□0G Series**  
3-stage Output: Target Temp. ±5°C in 5°C steps

Part No.	Target Temp.	Detection Temp.(°C)		
		CTRL Input		
		L (Low)	H (High)	O (Open)
BDE1200G	120°C	115.0	120.0	125.0
BDE1100G	110°C	105.0	110.0	115.0
BDE1000G	100°C	95.0	100.0	105.0
BDE0900G	90°C	85.0	90.0	95.0
BDE0800G	80°C	75.0	80.0	85.0
BDE0700G	70°C	65.0	70.0	75.0
BDE0600G	60°C	55.0	60.0	65.0
BDE0500G	50°C	45.0	50.0	55.0
BDE0400G	40°C	35.0	40.0	45.0
BDE0300G	30°C	25.0	30.0	35.0
BDE0200G	20°C	15.0	20.0	25.0
BDE0100G	10°C	5.0	10.0	15.0
BDE0000G	0°C	-5.0	0.0	5.0
BDE9100G	-10°C	-15.0	-10.0	-5.0
BDE9200G	-20°C	-25.0	-20.0	-15.0

**2.5°C Step BDF□□□0G Series**  
9-stage Output: Target Temp. ±10°C in 2.5°C steps

Part No.	Target Temp.	Detection Temp.(°C)									
		C1, C2 Input (L : Low, H : High, O : Open)									
		L : L	L : H	L : O	H : L	H : H	H : O	O : L	O : H	O : O	
BDF1200G	120°C	110.0	112.5	115.0	117.5	120.0	122.5	125.0	127.5	130.0	
BDF1000G	100°C	90.0	92.5	95.0	97.5	100.0	102.5	105.0	107.5	110.0	
BDF0800G	80°C	70.0	72.5	75.0	77.5	80.0	82.5	85.0	87.5	90.0	
BDF0600G	60°C	50.0	52.5	55.0	57.5	60.0	62.5	65.0	67.5	70.0	
BDF0400G	40°C	30.0	32.5	35.0	37.5	40.0	42.5	45.0	47.5	50.0	
BDF0200G	20°C	10.0	12.5	15.0	17.5	20.0	22.5	25.0	27.5	30.0	
BDF0000G	0°C	-10.0	-7.5	-5.0	-2.5	0.0	2.5	5.0	7.5	10.0	
BDF9200G	-20°C	-30.0	-27.5	-25.0	-22.5	-20.0	-17.5	-15.0	-12.5	-10.0	

ROHM's BDE/BDF series of thermostat output temperature sensors integrate a temperature detection function on a single chip, eliminating the need for troublesome circuit design. In addition, switchable detection temperature capability increases thermal design freedom and simplifies costs by making multiple temperature ICs unnecessary.

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