

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

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## Interface IC

### Package Information

#### 1. Factory order for circuits

Factory order for circuits described in this document include a three-part type number as explained in the following example.

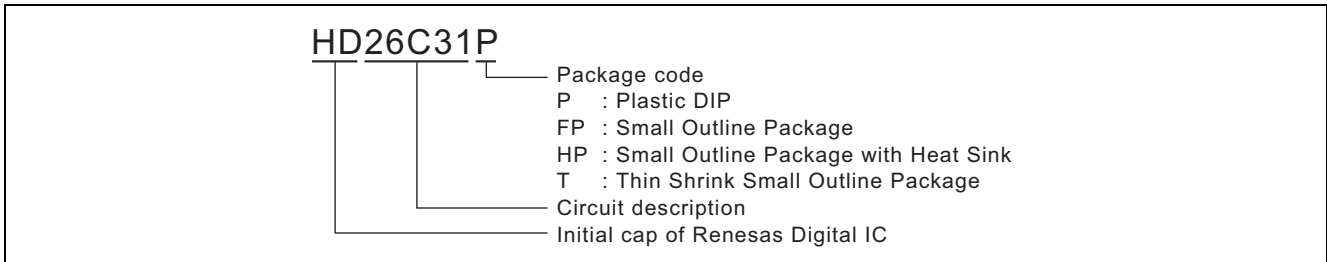


Figure 1 Factory order for circuits

#### 2. Thermal Resistance of the Package

##### 2.1 Plastic DIP Package

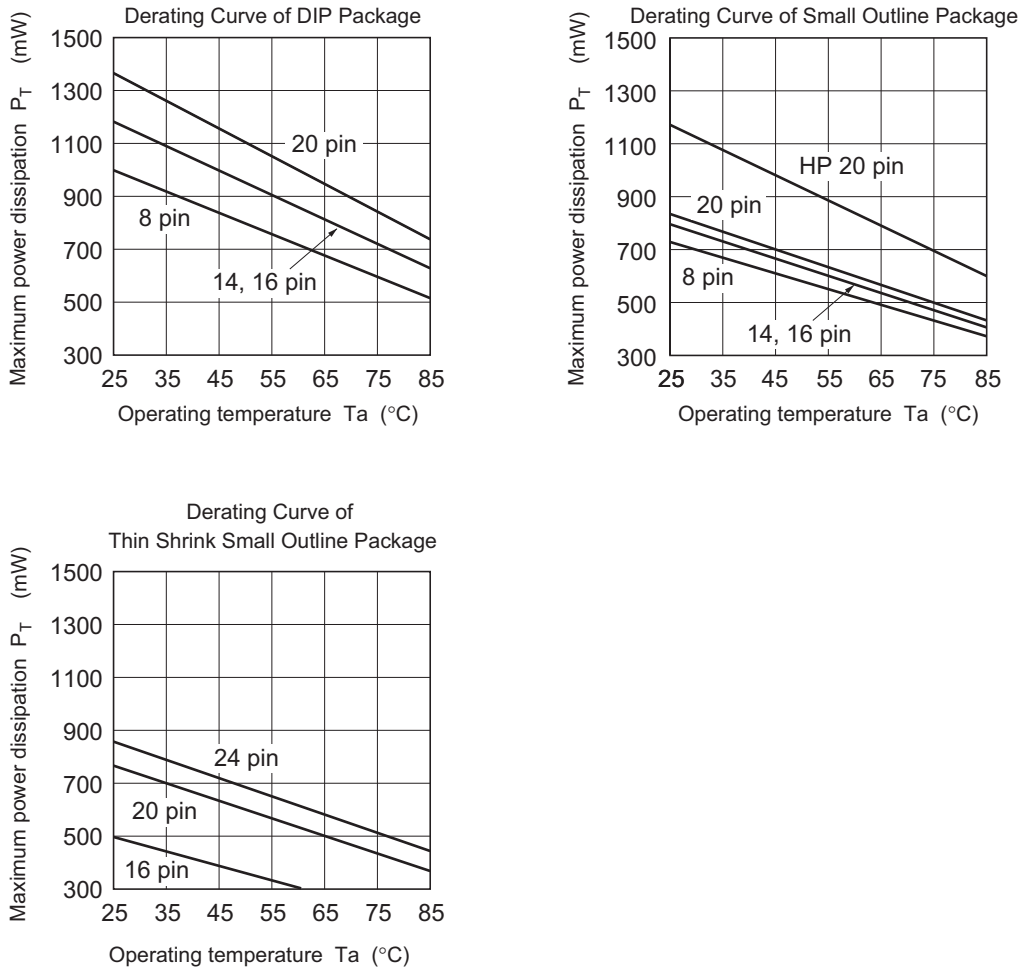
Number of Pin	8 Pin	14, 16 Pin	20 Pin
Thermal resistance $\theta_{j-a}$ ( $^{\circ}\text{C}/\text{W}$ )	125	105	90
Derating factor ( $\text{mW}/^{\circ}\text{C}$ )	8.0	9.5	11.0
Maximum power dissipation (mW)	1000	1185	1375

##### 2.2 Small Outline Package

Number of Pin	8 Pin	14, 16 Pin	20, 24 Pin	HP20Pin
Thermal resistance $\theta_{j-a}$ ( $^{\circ}\text{C}/\text{W}$ )	170	160	150	107
Derating factor ( $\text{mW}/^{\circ}\text{C}$ )	5.9	6.3	6.7	9.3
Maximum power dissipation (mW)	735	785	835	1165

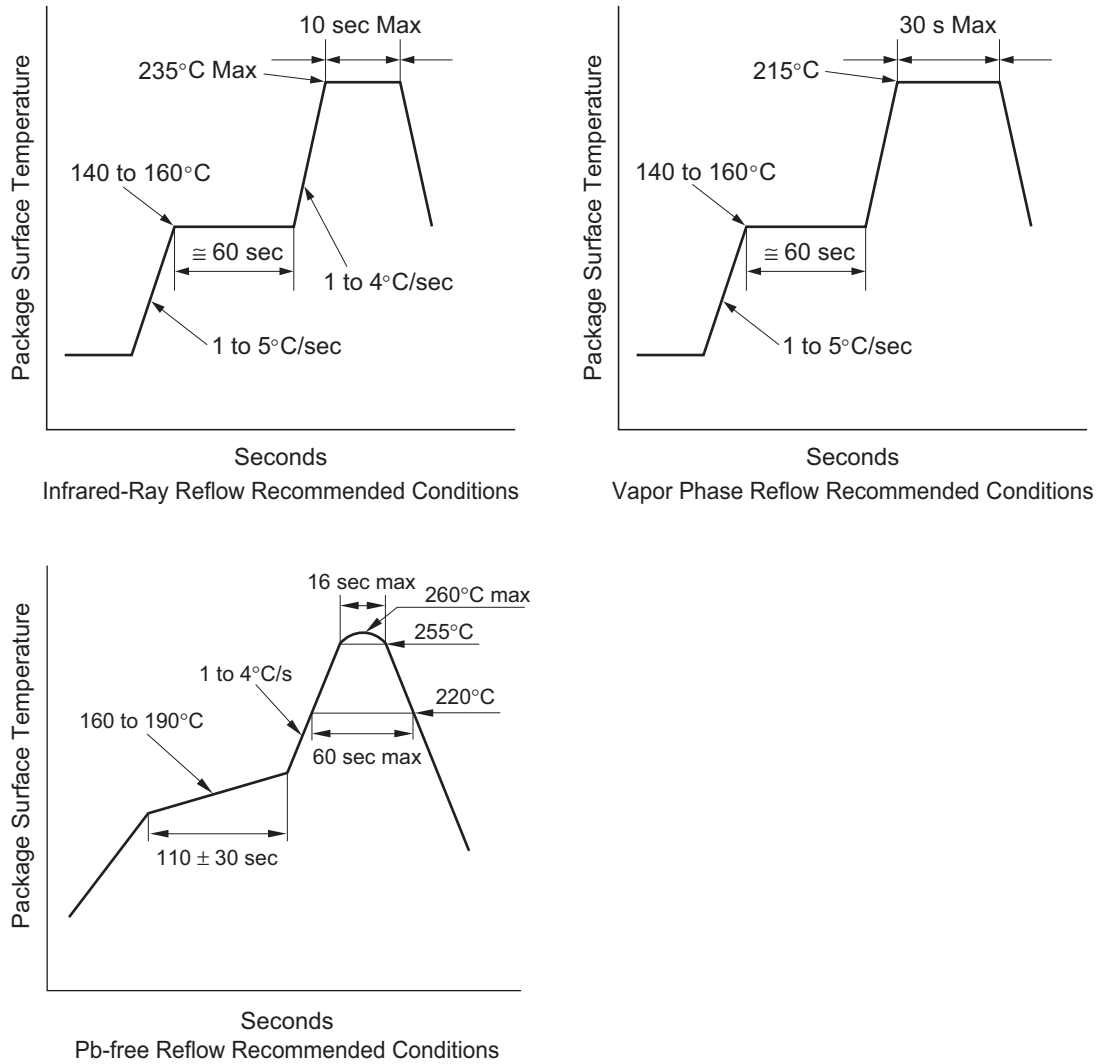
##### 2.3 Thin Shrink Small Outline Package

Number of Pin	16 Pin	20 Pin	24 Pin
Thermal resistance $\theta_{j-a}$ ( $^{\circ}\text{C}/\text{W}$ )	250	165	145
Derating factor ( $\text{mW}/^{\circ}\text{C}$ )	4.0	6.1	6.9
Maximum power dissipation (mW)	500	757	862



- Notes: 1. Testing method:  $V_{BE}$  method, airflow: 0 m/sec  
 2. Mounting method: When a package is mounted on the glass epoxy board with writing density of 105.

Figure 2 Derating Curve



Note: As mounting methods for TSSOP, Renesas recommends the infraredray reflow, vapor phase reflow and Pb-free reflow. (Solder-dip is not recommended.)

Figure 3 Mounting Method of TSSOP

**Revision Record**

Rev.	Date	Description	
		Page	Summary
1.00	Jul.09.04	—	First edition issued

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**Keep safety first in your circuit designs!**


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