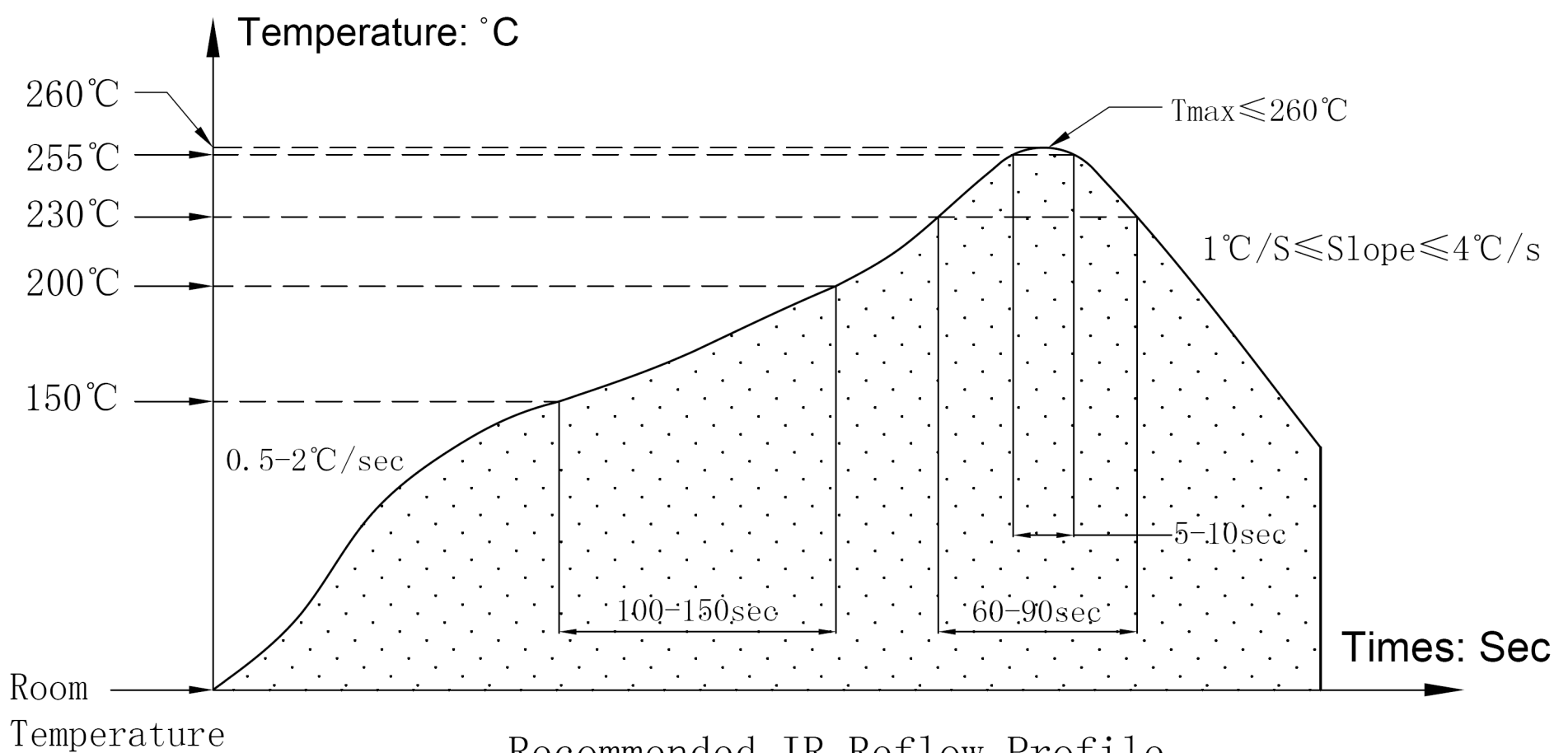


### Reflow Soldering Information

#### Explanation:

- 1) Preheating section zone: The temperature is from normal to 150 degrees Celsius. The temperature rise rate is from 0.5 to 2 degrees Celsius per second. The temperature range from 60 seconds to 150 seconds.
- 2) Uniform temperature zone: The temperature is 150-200 degrees Celsius. The temperature rise rate is 1°C/s. The time of this temperature range is 100-150 seconds. (remarks: This temperature zone must be heated slowly or it may lead to bad welding ).
- 3) Reflow zone: The temperature is from 230 to Tmax, and return to 230 degrees Celsius. The temperature range from 60 seconds to 90 seconds. The peak temperature zone(255-260 degrees Celsius) range from 5 to 10 seconds.
- 4) Cool down period: The temperature is from Tmax to 180 degrees Celsius. The temperature down rate no more than 4 degrees per second.
- 5) The temperature rise rate no more than 6 minute from the normal to 260 degree Celsius.
- 6) Reflow time aims to 60-90 seconds. For some board whose heat capacity is larger than the time requirement, the reflux time can be 120 seconds.
- 7) The reflow welding curve is only the recommended value, and the client side adjusts accordingly according to the actual production situation.



Recommended IR Reflow Profile

- 9) Specification of materials to meet the requirements of the above process: PA6T/PA9T/LCP/PPS and other heat-resisting materials.



### QMFZ2.E90350 Plastics - Component

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### Plastics - Component

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**KURARAY CO LTD**

E90350

GENESTAR DIV

OTE CENTER BLDG 1-1-3

OTEMACHI

CHIYODA-KU, TOKYO 100-8115 JAPAN

Material Dsg	Color	Min. Thk mm	Flame Class	H		R T I		H	D		
				W	A	Elec	Mech	V	4	C	
				I	I	Imp	Str	T	9	T	
<b>Aromatic Polyamide, furnished as pellets.</b>											
G2300(+)(#)	BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>Polyamide (PA), "Genestar", furnished as pellets.</b>											
GW2458HFM	BR	1.5	V-0	0	0	150	130	140	4	5	0
		3.0	V-0	0	0	150	130	140			
<b>Polyamide (PA), semi-aromatic, furnished as pellets.</b>											
G2(k)0	ALL	0.75	V-0	-	-	65	65	65	-	-	-
G2330(#)(%)	ALL	0.75	V-0	0	0	150	130	150	2	5	0
		1.5	V-0	0	0	150	130	150			
		3.0	V-0	0	0	150	130	150			
G2450(#)	ALL	0.75	V-0	0	0	65	65	65	4	5	1
		1.5	V-0	0	0	65	65	65			
		3.0	V-0	0	0	65	65	65			
G2500	ALL	0.75	V-0	-	-	65	65	65	-	-	-
G3330NA(#)	NC	0.75	V-0	-	-	65	65	65	-	-	-
<b>Polyamide 9T (PA9T), "Genestar", furnished as pellets.</b>											
GP2450NH	ALL	0.150	V-0	-	-	-	-	-	0	4	0
		0.40-0.44	V-0	3	3	140	90	130			
		1.5	-	-	-	140	90	130			
		3.0	-	-	-	140	100	140			
GW1458HF	ALL	0.75	HB	-	-	65	65	65	-	-	-
		3.0	HB	-	-	65	65	65			
GW2458HF	ALL	0.75	V-0	0	0	150	130	140	4	5	0
		1.5	V-0	0	0	150	130	140			
		3.0	V-0	0	0	150	130	140			

<b>LA121</b>	NC, BK	0.75	HB	-	-	65	65	65	-	-	-
		3.0	HB	-	-	65	65	65			
<b>LC122</b>	NC, BK	0.75	HB	-	-	65	65	65	-	-	-
		3.0	HB	-	-	65	65	65			
<b>N1006A</b>	NC, BK	1.5	HB	-	-	65	65	65	-	-	-
		3.0	HB	-	-	65	65	65			
<b>TA112</b>	WT	0.75	HB	-	-	65	65	65	-	-	-
		3.0	HB	-	-	65	65	65			
<b>Polyamide 9T (PA9T), furnished as pellets.</b>											
<b>G1300, G1300A, G1300H</b>											
	ALL	0.8	HB	-	-	65	65	65	-	-	-
<b>G1302</b>	NC, BK	0.8	HB	-	-	65	65	65	-	-	-
<b>G1302H</b>	BK	0.81	HB	-	-	65	65	65	-	-	-
<b>G1350H</b>	ALL	0.75	HB	-	-	50	50	50	-	-	-
		3.0	HB	-	-	50	50	50			
<b>GA2330</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2(k)1</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2(k)2</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2(n)0(#)</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2(p)0(#)</b>	ALL	0.75	V-0	-	-	150	120	130	-	-	-
		1.5	V-0	-	-	150	130	140			
		3.0	V-0	-	-	150	130	140			
<b>GN2(q)0(#)</b>	ALL	0.75	V-0	-	-	150	120	130	-	-	-
		1.5	V-0	-	-	150	130	140			
		3.0	V-0	-	-	150	130	140			
<b>GN2200(#)</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2330(#)</b>	ALL	0.75	V-0	0	0	150	120	130	3	5	1
		1.5	V-0	0	0	150	130	140			
		3.0	V-0	0	0	150	130	140			
<b>GN2331</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2332</b>	ALL	0.75	V-0	0	0	150	115	130	4	5	1
		1.5	V-0	0	0	150	115	130			
		3.0	V-0	0	0	150	125	140			
<b>GN2450(#)</b>	ALL	0.75	V-0	0	0	150	120	130	4	4	0
		1.5	V-0	0	0	150	130	140			
		3.0	V-0	0	0	150	130	140			
<b>GN2500(#)</b>	ALL	0.75	V-0	-	-	150	130	140	-	-	-
		1.5	V-0	-	-	150	130	140			
		3.0	V-0	-	-	150	130	140			
<b>GN2501</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GN2502</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GR2300(r)</b>	ALL	0.8	V-0	0	0	150	110	115	3	5	0
		1.5	V-0	0	0	150	120	125			

		3.0	V-0	0	0	150	125	130			
<b>GT2330</b>	NC, BK	0.8	V-0	-	-	65	65	65	-	-	-
	ALL	0.94	V-0	-	-	65	65	65			
<b>GW2(m)8HF</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GW2338HF</b>	BK, NC	0.75	V-0	-	-	65	65	65	-	-	-
<b>GW2459</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GW2508</b>	NC, BK	0.75	V-0	0	0	150	130	140	3	4	1
		1.5	V-0	0	0	150	130	140			
		3.0	V-0	0	0	150	130	140			
<b>GW2558</b>	NC, BK	0.75	V-0	-	-	65	65	65	-	-	-
<b>GW2558HF</b>	BK, NC	0.75	V-0	-	-	65	65	65	-	-	-
<b>N1000A</b>	NC, BK	0.75	HB	-	-	65	65	65	-	-	-
<b>T1320A</b>	NC	0.75	HB	-	-	50	50	50	-	-	-
<b>T1320H</b>	NC	0.75	HB	-	-	50	50	50	-	-	-
<b>T1420A</b>	NC	0.75	HB	-	-	50	50	50	-	-	-
<b>T1420H</b>	NC	0.75	HB	-	-	50	50	50	-	-	-
<b>Polyethylene Terephthalate (PET), "ESMO", furnished as pellets.</b>											
<b>50(b)(#)</b>	ALL	0.75	HB	2	0	75	75	75	2	7	3
		1.5	HB	1	0	75	75	75			
		3.0	HB	0	0	75	75	75			
<b>50(b)-NN(#)</b>	ALL	0.75	V-0	0	0	75	75	75	0	6	3
		1.5	V-0	0	0	75	75	75			
		3.0	V-0	0	0	75	75	75			
<b>5030-NN(#)</b>	ALL	0.75	V-0	0	0	150	150	150	0	6	3
		1.5	V-0	0	0	150	150	150			
		3.0	V-0	0	0	150	150	150			
<b>Thermoplastic Polyurethane (TPU), furnished as pellets.</b>											
<b>A165S(#)</b>	NC, BK	1.0	HB	-	-	50	50	50	-	-	-
	ALL	1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
<b>SU6050(#)</b>	ALL	1.0	HB	4	0	50	50	50	-	-	-
		1.5	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
<b>TU-HM45395</b>	ALL	1.5	HB	-	-	50	50	50	-	-	-

(#) - Suffix optional.

(%) - Virgin and regrind up to 50% by weight inclusive have the same flammability and izod impact characteristics only.

(+) - May be followed by two letters denoting color.

(b) - A two digit number 16-29 incl. denoting glass fiber content.

(k) - A two digit number (34-49 incl.) denoting the content of glass fiber.

(m) - A two digit number 34-54 incl. denoting the glass fiber content

(n) - A two digit number (21-32 incl.) denoting glass fiber content.

(p) - A two digit number (34-44 incl.) denoting the content of glass fiber.

(q) - A two digit number (46-49 incl.) denoting the content of glass fiber.

(r) - Virgin and regrind up to 50% by weight inclusive only have the same flammability characteristics in the natural and black colors. No other properties evaluated.

Marking: Company name or trademark **MRP<sup>®</sup> (PP) MRP<sup>®</sup> (NYLON66)**  
**イソペイト** **ESMO** **イソ** and material designation on container, wrapper or finished part.

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