

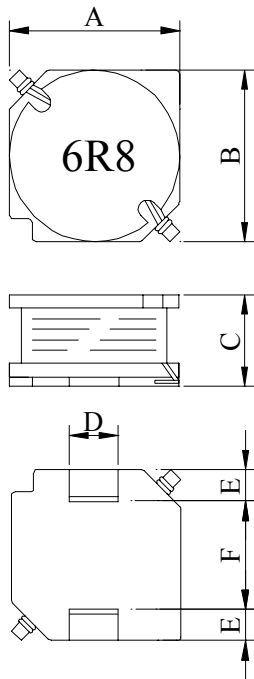
SPECIFICATION FOR APPROVAL

REF :

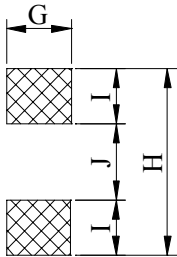
PAGE: 1

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB1305□□□□L□-□□□
		ABC'S ITEM NO.	

I . CONFIGURATION & DIMENSIONS :



A :	12.70±0.3	m/m
B :	12.70±0.3	m/m
C :	4.80±0.3	m/m
D :	3.00 typ	m/m
E :	2.00 typ	m/m
F :	8.60 typ	m/m
G :	3.60 ref.	m/m
H :	13.60 ref.	m/m
I :	2.60 ref.	m/m
J :	8.40 ref.	m/m



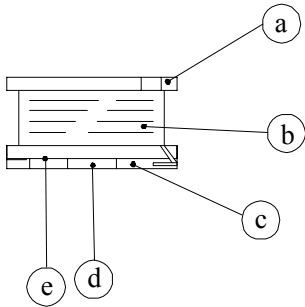
(PCB Pattern)

II . SCHEMATIC DIAGRAM :



III . MATERIALS :

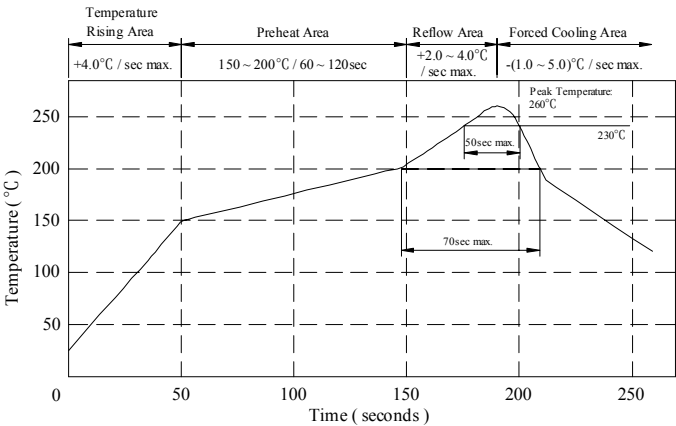
- a . Core : Ferrite DR core
- b . Wire : Enamelled copper wire (class F)
- c . Base : LCP E4008
- d . Terminal : Cu/Sn
- e . Adhesive : Epoxy resin
- f . Remark : Products comply with RoHS' requirements



Peak Temp : 260°C max.
Max time above 230°C : 50sec max.
Max time above 200°C : 70sec max.

IV . GENERAL SPECIFICATION :

- a . Temp. rise 40°C max.
- b . Storage Temp. : -40°C ----+125°C
- c . Operating Temp. : -40°C----+125°C
(Temp. rise included)
- d . Resistance to solder heat : 260°C.10 secs.



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PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB1305□□□□L□-□□□
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V . ELECTRICAL CHARACTERISTICS :

DWG No.	L (μ H)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (m Ω) max.	Irms (A)	Isat (A)
			L (Hz)	Q (MHz)				
SB13052R5YL□-□□□	2.5 $\pm$ 25%	20	100K/10mV	7.96	61.0	14	7.20	8.00
SB13053R5YL□-□□□	3.5 $\pm$ 25%	18	100K/10mV	7.96	43.0	16	6.00	7.00
SB13054R6YL□-□□□	4.6 $\pm$ 25%	20	100K/10mV	7.96	35.0	18	5.20	6.00
SB13056R8YL□-□□□	6.8 $\pm$ 25%	18	100K/10mV	7.96	32.0	24	4.30	5.20
SB1305100ML□-□□□	10.0 $\pm$ 20%	25	100K/10mV	2.52	27.0	37	3.60	4.40
SB1305150ML□-□□□	15.0 $\pm$ 20%	25	100K/10mV	2.52	24.0	46	3.30	3.70
SB1305220ML□-□□□	22.0 $\pm$ 20%	26	100K/10mV	2.52	20.0	62	2.90	3.00
SB1305330ML□-□□□	33.0 $\pm$ 20%	22	100K/10mV	2.52	16.0	85	2.50	2.60
SB1305470ML□-□□□	47.0 $\pm$ 20%	20	100K/10mV	2.52	13.0	130	1.90	2.00
SB1305680ML□-□□□	68.0 $\pm$ 20%	20	100K/10mV	2.52	11.0	165	1.65	1.80
SB1305101KL□-□□□	100.0 $\pm$ 10%	18	100K/10mV	0.796	11.0	255	1.40	1.40
SB1305151KL□-□□□	150.0 $\pm$ 10%	15	100K/10mV	0.796	8.0	380	1.20	1.15
SB1305221KL□-□□□	220.0 $\pm$ 10%	15	100K/10mV	0.796	7.0	500	1.00	0.95
SB1305331KL□-□□□	330.0 $\pm$ 10%	10	100K/10mV	0.796	6.0	700	0.85	0.80
SB1305471KL□-□□□	470.0 $\pm$ 10%	10	100K/10mV	0.796	4.0	1150	0.67	0.70
SB1305681KL□-□□□	680.0 $\pm$ 10%	10	100K/10mV	0.796	3.5	1400	0.60	0.58
SB1305102KL□-□□□	1000.0 $\pm$ 10%	32	100K/10mV	0.252	2.7	2350	0.46	0.47

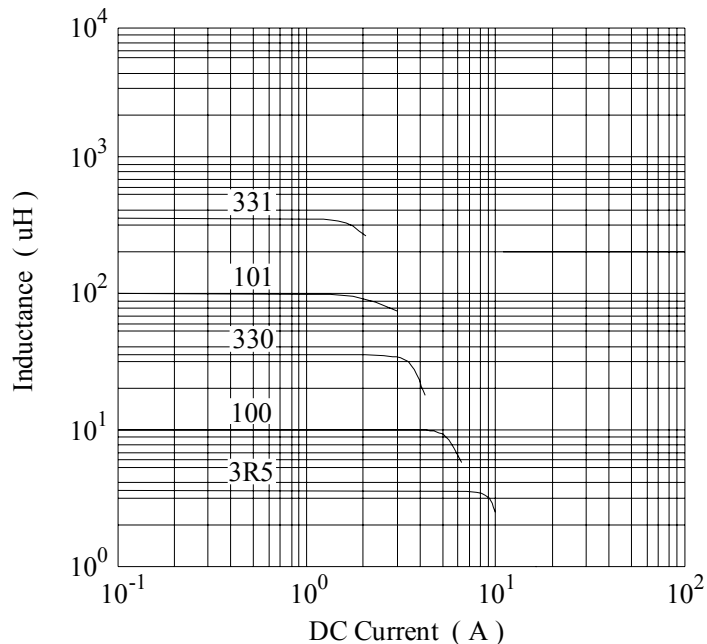
1). □ : Packaging Information... $\square$ Bulk $\square$ Taping Reel

2). "- □□□ " : Reference code

3). Irms base on temp. rise 40°C max.

4). Isat base on $\Delta L/L0A=25\%$ typ.

@ Inductance VS. DC Superposition Characteristics



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SPECIFICATION FOR APPROVAL

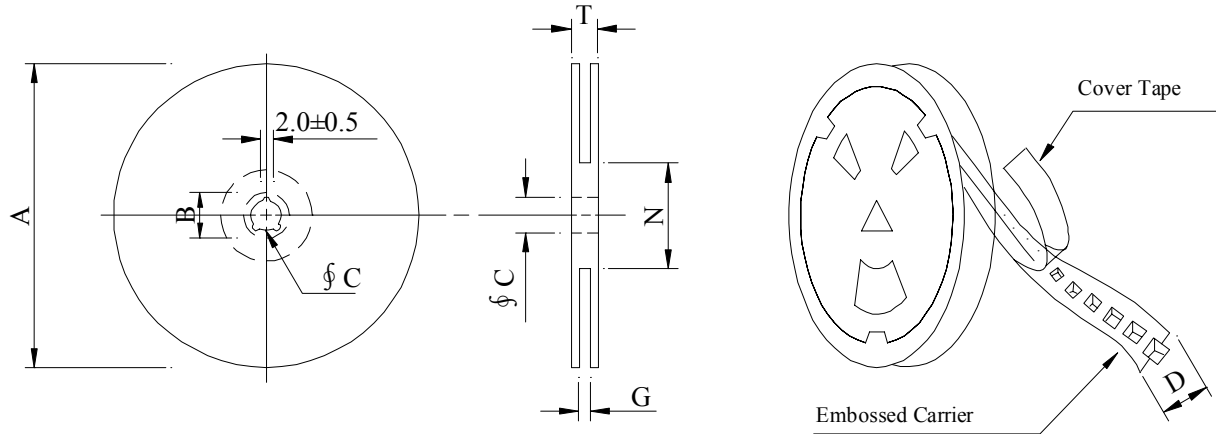
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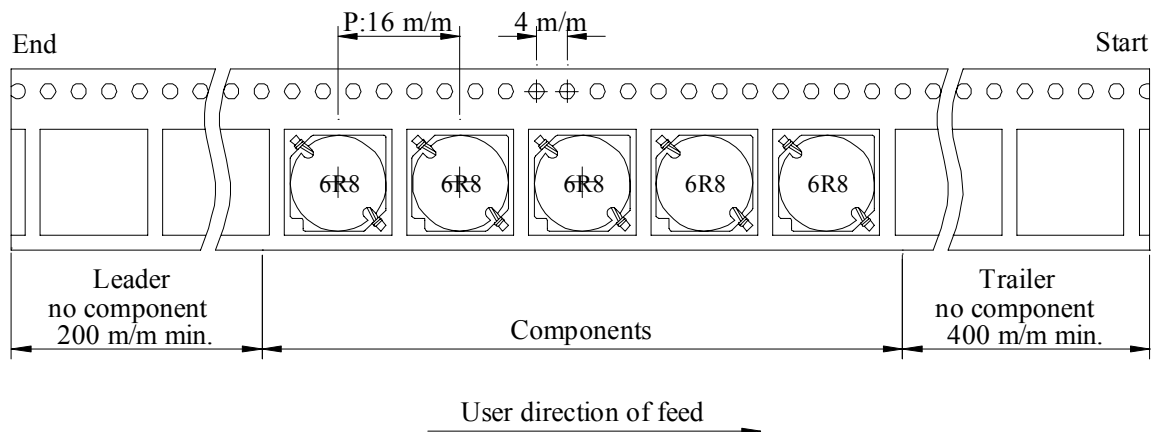
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		ABC'S ITEM NO.	

VI . PACKAGING INFORMATION :

(1) Configuration



※Carrier Tape Width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13	24	26 ⁺⁰	50 ⁻⁰	30.4

(3) Q'TY & G.W. Per package

Series	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
SB1305	600	1,430	13 - 24	2,400	6.8	40 x 40 x 24

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 ABC ELECTRONICS GROUP.

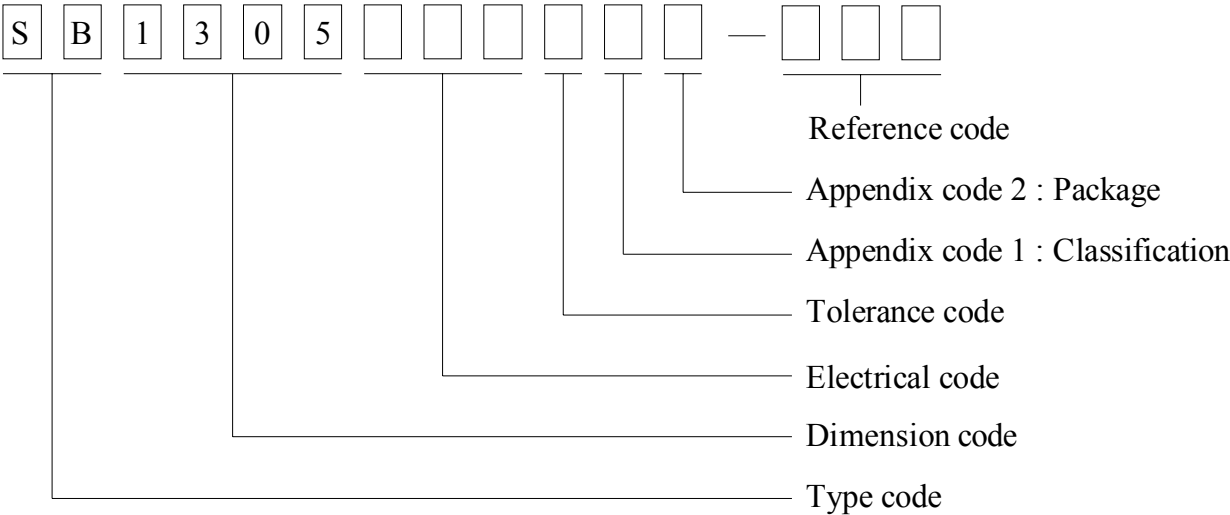
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VII . DWGING NUMBER EXPRESSION :



Appendix code 1 : Product Classification

- L : Lead Free Standard products comply with RoHS' requirements
- 1 ~ 9 : Lead Free Special products comply with RoHS' requirements

Appendix code 2 : Package Information

Code	Inner package	Inner package Q'TY	Remark
A	T.B.D.	T.B.D.	
B	T / R (Reel package)	600 pcs	

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VIII . RELIABILITY TEST :

Test item	Specification	Test condition
Solderability	More than 90% of the terminal electrode shall be covered With fresh solder.	Preheat : 150±25°C for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5°C Flux : Rosin Dip time : 4±1 seconds
Thermal shock test (Temp. cycle)	Inductance shall not change more than ±20%	Room temp. —————→ -25±2 °C 15 minutes 30 minutes Room temp. —————→ 85±2 °C 15 minutes 30 minutes Total : 50 cycles
Humidity Resistance test		Temperature : 40±2°C Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours
High temp. Resistance test		Temperature : 85±2°C Applied current : Per spec. Time : 500 hours

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NAME		ABC'S ITEM NO.	

IX . UL CARD :

OBMW2September 8, 2000

Magnet Wire-Component

JUNG SHING WIRE CO LTD

231 CHUNG CHENG RD, SEC 3 JEN-TEH HSIANG, TAINAN

HSIEN TAIWAN

E174837

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
AIW	—	Polyamideimide	—	—	MW81-C	220
CFUEWB	—	Polyurethane	—	—	MW75C	130
EIAIW	—	Polyesterimide	Polyamideimide	—	MW35C	200
EILOCKY	—	Polyesterimide	Polyamide	—	—	180
EILOCKW	—	Polyesterimide	Modified Epoxy	—	—	200
EIW	—	Polyesterimide	—	—	—	220
EIW-2	—	Polyesterimide	—	—	MW74-C	200
FL.EILOCKY	—	Modified Polyester	Polyamide	—	—	155
LSFFW	—	Polyurethane	—	—	MW79-C	155
LSUEW	—	Polyurethane	—	—	—	130
PEW	—	Polyester	—	—	—	155
PEY	—	Polyester	Nylon	—	MW24-C	155
SF.FLW	—	Modified Polyester	—	—	MW26C	155
SF.EIW	—	Polyesterimide	—	—	MW77C	180
SF.BY@	—	Modified Polyester	Nylon	—	MW27-C	155
SF.FLY@	—	Modified Polyester	Nylon	—	MW27-C	155
SF.BLOCKBS	—	Modified Polyester	Modified Polyamide	—	—	155
SF.EILOCKY#	—	Polyesterimide	Polyamide	—	—	180
SF.EILOCKBS	—	Polyesterimide	Modified Polyamide	—	—	180
SF.BW@	—	Modified Polyester	—	—	MW26C	155
SFFW	—	Polyurethane	—	—	MW79	155

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A not-for-profit organization dedicated to public safety and committed to quality service

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
SFFY	—	Polyurethane	Polyamide	—	MW80C	155
UEW-1	—	Polyurethane	—	—	MW2-C	105
UEW-2	—	Polyurethane	—	—	—	130
UEW-4	—	Polyurethane	—	—	MW75C	130
UEY	—	Polyurethane	Nylon	—	MW28-C	130
UEY-2	—	Polyurethane	Polyamide	—	MW28-C	130

@-May be suffixed by LZ; # - May be suffixed by LZ, EL or LZL.

LZ - Signifies magned wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signifies base coated magnet wire twisted together and covered with top coat overall.

Marking: Company name or trademarks JSW or 榮星電線 , material designation or marked designation on packaed or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

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SUMITOMO CHEMICAL CO LTD 5-33 KITAHAMA 4-CHOME CHUO-KO, OSAKA JAPAN E54705 (M) <table><tr><th rowspan="2">Mtl Dsg</th><th rowspan="2">Col</th><th rowspan="2">Min Thk mm</th><th rowspan="2">UL94 Flame Class</th><th rowspan="2">Elec</th><th colspan="2">RTI</th><th rowspan="2">H W I</th><th rowspan="2">H A I</th><th rowspan="2">H V T R</th><th rowspan="2">D 4 9 5</th><th rowspan="2">C T I</th></tr><tr><th>Mech with Imp</th><th>w/o Imp</th></tr><tr><td colspan="12">Liquid crystal polyester (LCP), designated "EKONOL" or "SUMIKASUPER", furnished in the form of pellets, (Contd)</td></tr><tr><td rowspan="4">E4008 , E400X</td><td rowspan="4">NC , BK</td><td>0.30</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>0.75</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>3</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>1.5</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>2</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>3.0</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>1</td><td>4</td><td>0</td><td>5</td><td>4</td></tr><tr><td rowspan="4">E4008</td><td rowspan="4">NC , WT , BK</td><td>0.30</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>0.75</td><td>94V-0</td><td>220</td><td>180</td><td>220</td><td>3</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>1.5</td><td>94V-0</td><td>220</td><td>200</td><td>240</td><td>2</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>3.0</td><td>94V-0</td><td>220</td><td>200</td><td>240</td><td>1</td><td>4</td><td>0</td><td>5</td><td>4</td></tr><tr><td rowspan="4">E4010</td><td rowspan="4">NC , BK</td><td>0.30</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>0.75</td><td>94V-0</td><td>220</td><td>180</td><td>220</td><td>3</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>1.5</td><td>94V-0</td><td>220</td><td>200</td><td>240</td><td>2</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>3.0</td><td>94V-0</td><td>220</td><td>200</td><td>240</td><td>1</td><td>4</td><td>0</td><td>5</td><td>4</td></tr><tr><td rowspan="4">E400(Y)L , E4008L</td><td rowspan="4">NC , BK</td><td>0.30</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>0.75</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>3</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>1.5</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>2</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>3.0</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>1</td><td>4</td><td>0</td><td>5</td><td>4</td></tr><tr><td rowspan="4">E4810</td><td rowspan="4">NC , BK</td><td>0.30</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>0.75</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>0</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>1.5</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>0</td><td>4</td><td>—</td><td>—</td><td>—</td></tr><tr><td>3.0</td><td>94V-0</td><td>130</td><td>130</td><td>130</td><td>1</td><td>4</td><td>0</td><td>5</td><td>4</td></tr></table> (X) Denotes any number 1 thru 9. (Y) Denotes any number 1 thru 7.												Mtl Dsg	Col	Min Thk mm	UL94 Flame Class	Elec	RTI		H W I	H A I	H V T R	D 4 9 5	C T I	Mech with Imp	w/o Imp	Liquid crystal polyester (LCP), designated "EKONOL" or "SUMIKASUPER", furnished in the form of pellets, (Contd)												E4008 , E400X	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—	0.75	94V-0	130	130	130	3	4	—	—	—	1.5	94V-0	130	130	130	2	4	—	—	—	3.0	94V-0	130	130	130	1	4	0	5	4	E4008	NC , WT , BK	0.30	94V-0	130	130	130	—	—	—	—	—	0.75	94V-0	220	180	220	3	4	—	—	—	1.5	94V-0	220	200	240	2	4	—	—	—	3.0	94V-0	220	200	240	1	4	0	5	4	E4010	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—	0.75	94V-0	220	180	220	3	4	—	—	—	1.5	94V-0	220	200	240	2	4	—	—	—	3.0	94V-0	220	200	240	1	4	0	5	4	E400(Y)L , E4008L	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—	0.75	94V-0	130	130	130	3	4	—	—	—	1.5	94V-0	130	130	130	2	4	—	—	—	3.0	94V-0	130	130	130	1	4	0	5	4	E4810	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—	0.75	94V-0	130	130	130	0	4	—	—	—	1.5	94V-0	130	130	130	0	4	—	—	—	3.0	94V-0	130	130	130	1	4	0	5	4
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