

- Opnext Japan Technical Information - (Device Business Unit)

Device Business Unit
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Title	Status of switch over on Laser diode lead free solder and RoHS correspondence (Information of the latest situation of lead free)	Purpose : 1 Change of specification 2 Document review ③ Additional information : the latest situation of lead free	Serial No. : OPD
Object products	All Information and Industry laser diodes	Related document —	Expiration date Mar. 2006

OPD has been notifying the switch over guidance and period to lead free solder on Laser Diode from April in 2005. Please be advised below statement of the latest status in order to implement the smooth delivery on each customer. Also, RoHS correspondence will be completed due to this switching over on Laser diode lead free solder.

1. Subject

In terms of OPD proceeds on switching lead free solder on Laser Diode according to the guidance of pre-notification, We would like to inform the date code and switching period.
Please advice customers of the inquiry about RoHS.

2. Reason

To prevent confusion and disruption in terms of delivery and to proceed on the smooth switch over operation with updated status.

3. Switchover schedule

Please refer attachment 1.

OPD is almost finished switching over period of mass production parts therefore please re-announce on each customers by the proffered date.

Also, Please be acknowledged and cooperate with changing the orders from lead free parts to leaded parts, as a matter of demand-supply balance and JDM stock situation around the period of transition.

4. RoHS correspondence

The products on attachment-1 do not contain below hazard substances by RoHS after switching over to lead free solder.

1. Lead 2. Mercury 3. Cadmium 4. Hexavalent chromium
5. Polybrominated biphenyl 6. Polybrominated diphenyl ether

Add: The products which have not switched over to free solder do not contain the hazard substances by RoHS except lead.

* RoHS: Restriction of the Use of Certain Hazardous Substances in Electrical and Electrical equipment which is taken effect by EU.

Attachment 1. Mass production schedule and Date code of Laser diode lead free solder

Part numbers	Mass production	Switchover Lot No. of Lead free products
HL6314MG-A	Mar. /' 05~	5 C ~
HL6316G-A		
HL6324MG-A		
HL6312G-A		
HL6313G-A		
HL6319G-A		
HL6320G-A		
HL6321G-A		
HL6322G-A		
HL6325G-A		
HL6326G-A		
HL6327MG-A		
HL6328MG-A		
HL6331G-A		
HL6332G-A	Feb. /' 05 ~	5 B ~
HL6333MG-A	Mar. /05 ~	5 C ~
HL6334MG-A		
HL6345G	Jan. /1 ~	6 A ~
HL6323MG-A		
HL6335G-A	Feb. /' 06 ~ Plan	Samples available
HL6336G-A		
HL6340MG-A		
HL6341MG-A		
HL6343G-A		
HL6344G-A		
HL6347MG-A		
HL6348MG-A		
HL6501MG-A	July/' 05 ~	5 G ~
HL6512MG-A		
HL6513FM-A		
HL6515MG-A		
HL6525MG-A		
HL6526FM-A		
HL6520MG	Apr. /04~ (Date code: 5D~)	
HL6712G	Mar. /' 05~ (Date code: 5C~)	
HL6714G-A	Apr. /' 05 ~	5 D ~
HL6722G-A	Mar. /' 05 ~	5 C ~
HL6724MG-A		
HL6741G	Mar. /' 05~ (Date code: 5C~)	
HL6738MG-A	July/' 05 ~	5 G ~
HL6743FG	Feb. /' 05~ (Date code: 5B~)	
HL6745FG	Nov. /' 04~ (Date code: 4L~)	
HL7851G	Apr. /' 05~ (Date code: 5D~)	
HL8325G-A	Apr. /' 05 ~	5 D ~
HL6339G	Apr. /' 05~ (Date code: 5D~)	

Note) In case of "available" indication, the sample submission was done.

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Title		Purpose :	Serial No. :
	Part number of laser diode lead free solder	1 Change of specification 2 Document review ③ Additional information	
Object products		Intended product	Expiration date
	Information and Industry laser diodes	ALL	Apr 05

Please be advised that Opnext Device Business Unit (OPD) will identify the lead free products with specific part numbering.

1 Change of subject

OPD will introduce unique part numbering of the lead free products to add "-A" after the conventional part numbers.

2 Reason

To easy recognizing lead free products without actual seeing.

3 Lead free products part number

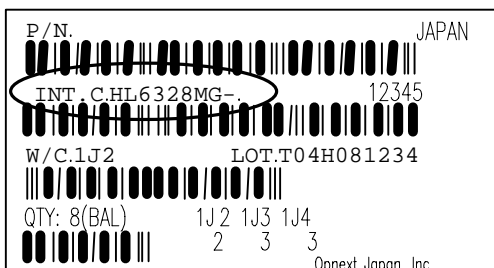
Part number to placing order

Adding "-A" to the conventional part number

<example>	HL6312G	HL6312G-A
	HL6312G96	HL6312G96-A

Part number on Label

Adding "-A" to the conventional part number



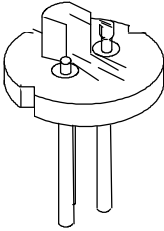
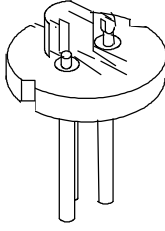
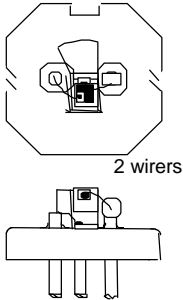
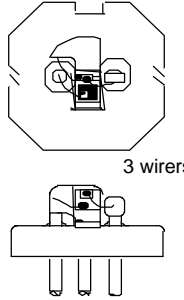
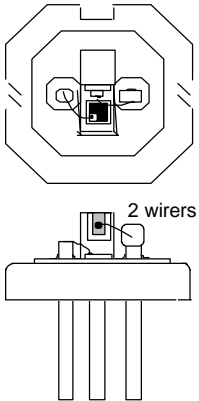
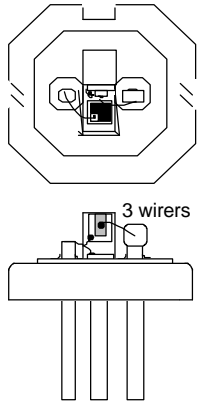
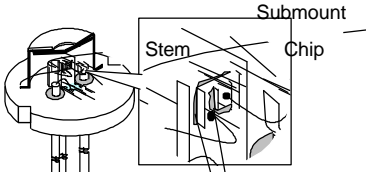
The part numbers with "-A" are temporary ones for the transition period from with lead to lead free products. The official part numbers in brochures or on CAS should not be changed.

5. Remarks

Placing order with "-A" part number should be met the mass production schedule in Appendix 1. But OPD may ask customers to change without "-A" product, it means with lead product, from the point of availability point of view.

Attachment 2

Change item details

Item	Conventional	New	Reason	Applied product
Chip and sub-mount solder material	PbSn	AuSn	for lead free	All
Submount material	Si	AlN	Standardization of the sub mount accompanying the formation of lead free	HL6314MG,HL6316G HL6724MG
	SiC			Products other than the above mentioned 3 products
MG-type stem (Heat sink form)			Standardization of a stem (header form was changed for third wire bonding mentioned below)	HL6314MG HL6724MG
Bonding wire number	 2 wirers	 3 wirers	Standardization of submount (Unification to insulated submount)	HL6314MG HL6724MG
	 2 wirers	 3 wirers		
Solder change portion detail	 <p>Submount Stem Chip</p> <p>Chip bonding solder (to AuSn from PbSn) Submount bonding solder (to AuSn from PbSn)</p>			