



GENERAL ANNOUNCEMENT
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19 Sep 2007

SUBJECT: ON Semiconductor General Announcement #16047

TITLE: ON Semiconductor Conversion to Halide Free Mold compounds

EFFECTIVE DATE: 19 Sep 2007

AFFECTED PRODUCT DIVISION: ALL

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Your Local ON Semiconductor Sales Representative or Elizabeth.Becker@onsemi.com

DESCRIPTION AND PURPOSE:

ON Semiconductor is dedicated to providing our customers with products that meet environmental guidelines such as RoHS regulations, as well as Halogen free or 'Green' mold compound needs. It is our intent to provide these products with the continued superior quality and lasting reliability that our customers value.

This General Announcement is to notify our customers that ON Semiconductor is converting many package types to Halogen free or 'Green' mold compounds. Some packages are already available as 'Green' today.

ON uses the IEC 61249-2-21 definition of 'Green' mold compounds which are Halogen-free according to IEC 61249-2-21 definition of:

- 900 ppm maximum chlorine
- 900 ppm maximum bromine
- 1500 ppm maximum total halogens

AND

- contain less than 1,000 ppm Sb2O3

ON Semiconductor has been offering Pb-free products which comply with the RoHS requirements for many years. These products have part numbers ending with a "G" suffix. The ON Semiconductor 'Green' devices will comply with the definition above, as well as meet all current RoHS requirements.

Packages using the 'Green' Halide free mold compounds will convert by date code and factory locations. There will be a Single manufacturing cut off date for each device and package combination for traceability. Customers may receive devices as: 1) Combination of Halogen free and Halogenated mold compound (while existing finished goods inventories are being used), or 2) Halogen Free exclusive. Final PCNs with devices and packages will be issued as Reliability data is completed on each package at each factory.

ON Semiconductor is committed to keeping our customers apprised of our intent to comply with all Environmental requirements. Please visit the ON Semiconductor Environmental Programs web site for more information on this important topic.



RELIABILITY TESTING

QUALIFICATION VEHICLES		
ChipFET	SOT-5XX (2 Vehicles)	UDFN/UQFN (4 Vehicles)
Micro8/10 (2 Vehicles)	TSOP5/6	LLGA
SC-70	US8	SOIC (4 Vehicles)
SC-75	Powermite	TSSOP (3 Vehicles)
SC-88	SMA	LQFP
SC-88A	SMB	DPAK
SOD-123	SMC	D2PAK
SOT-223 (4 Vehicles)	DFN/QFN (4 Vehicles)	PDIP (3 Vehicles)
SOT-23	WDFN/WQFN (4 Vehicles)	TO-220

QUALIFICATION TESTS	# OF MFG LOTS	# OF UNITS/LOT
Preconditioned Scanning Acoustical Tomography	3	5
Preconditioned Autoclave (100% RH, 121C, 15PSIG) - 96 Hrs	3	80
Preconditioned Highly Accelerated Stress Test - 96 Hrs or Preconditioned High Temperature, High Humidity, Bias - 1008 Hrs	3	80
Preconditioned Temperature Cycle (-65C to +150C) - 500 Cycles (IC)/1000 Cycles (Discrete)	3	80
High Temperature Operating Life Test (100% Bias, 150C) - 504 Hrs	3	80
High Temperature Gate Bias (FET)/High Temperature Reverse Bias (Bias, Max Tj) - 1008 Hrs	3	80
High Temperature Storage Life (150C) - 1008 Hrs	3	80
Resistance to Solder Heat 260C	1	30
Electrical Distributions	3	30
Physical Dimensions	1	30
External Visual	3	All



Conversion Schedule

Package Family	CURRENTLY USING GREEN MOLD COMPOUND IN PRODUCTION	FINAL PCN DATE	GREEN COMPOUND PRODUCTION AVAILABILITY DATE
DFN/QFN	Y	---	---
WDFN/WQFN	Y	---	---
UDFN/UQFN	Y	---	---
DFN CLIP (SO8FL)	Y	---	---
LLGA	Y	---	---
SO8 FET	Y	---	---
D2PAK IC	Y	---	---
PLCC	Y	---	---
PLLP	Y	---	---
PSOP	Y	---	---
SPAK	Y	---	---
CSP	Y	---	---
LGA	Y	---	---
ULL	Y	---	---
SOT 23	N	Q4 2007	Q1 2008
SC 59/74/88/88A/89	N	Q4 2007	Q1 2008
SOD 123/323/523/723/923	N	Q4 2007	Q1 2008
SOT 723/923	N	Q4 2007	Q1 2008
CHIPFET	N	Q4 2007	Q1 2008
SC 75/82AB	N	Q4 2007	Q1 2008
SOT 223	N	Q4 2007	Q1 2008
SOT 553/563	N	Q4 2007	Q1 2008
TSOP	N	Q4 2007	Q1 2008
US8	N	Q4 2007	Q1 2008
POWERMITE	N	Q4 2007	Q1 2008
SMB/SMC	N	Q4 2007	Q1 2008
SOIC NB	N	Q4 2007	Q1 2008
SOIC WB	N	Q4 2007	Q1 2008
PDIP	N	Q4 2007	Q1 2008
MICRO 8/10 (MSOP)	N	Q1 2008	Q2 2008
SC70	N	Q1 2008	Q2 2008
SMA	N	Q1 2008	Q2 2008
SOIC WB	N	Q1 2008	Q2 2008
TSSOP	N	Q1 2008	Q2 2008
SOIC HIGH VOLTAGE IC	N	Q1 2008	Q2 2008
SOT 223 HIGH VOLTAGE IC	N	Q1 2008	Q2 2008
LQFP	N	Q1 2008	Q2 2008

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SOEIAJ	N	Q1 2008	Q2 2008
TO 220 IC	N	Q1 2008	Q2 2008
TO 220 DISCRETE	N	Q2 2008	Q3 2008
TO 218/247/264	N	Q2 2008	Q3 2008
D2PAK DISCRETE	N	Q2 2008	Q3 2008
CASE 77	N	Q2 2008	Q3 2008
DPAK	N	Q2 2008	Q3 2008
TO-92	N	NO PLANS AT THIS TIME	
AXIAL LEAD	N	NO PLANS AT THIS TIME	

AFFECTED DEVICE LIST

This is a General Announcement. General Announcements do not contain a specific list of affected devices. GPCN uses these announcements when all or no devices are affected.