





Integrated Device Technology, Inc.  
2975 Stender Way, Santa Clara, CA - 95054

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT - PCN #: G-0110-06 REV.1

**PCN Type:** Mold compound materials, Sumitomo EME-7351LP and EME-S351LP.

**Data Sheet Change:** No

**Detail Of Change:** This change will be implemented on all applicable plastic package (except BGA) families.

Description	From	To
Mold Compound	Shinetsu KMC 182-9 KMC 184 KMC184VA Sumitomo 6300 Sumitomo 7320 series	Sumitomo EME-7351LP EME-S351LP

#### Conversion schedule (Estimated):

Please contact your local field sales representative for sample availability and production shipments.



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**Qualification Plan:** Following reliability tests will be performed per package family  
Qualification data is available upon request.

	Test Methods	Sample size /# Fails
Highly Accelerated Stress Test (HAST) (100 Hrs, @ 130°C/85%RH,Static Bias)	EIA/JESD22-A110	45/0
Temperature Cycling, (-65°C to +150°C, 500 cyc)	MIL-STD-883, Method 1010	45/0
Life Test, (+125°C, 1000 hrs)	MIL-STD-883, Method 1005	77/0
Hi Temp Bake, (+150°C, 1000 hrs)	MIL-STD-883, Method 1008	77/0
Auto Clave (SPP), (168Hrs, @ 2ATM, 121°C)	EIA/JESD22-A102	45/0
Package Moisture Characterization (Note 1)	JEDEC J-STD-20	22/0
Internal Visual Inspection	MIL-STD-883, Method 2010	5/0
External Visual Inspection	MIL-STD-883, Method 2009	25/0
S.A.T.	JEDEC J-STD-035	10/0
X-ray Examination	Per IDT specification	45/0
Bond Pull Test	MIL-STD-883, Method 2011	5/0
Solderability Test	MIL-STD-883, Method 2003	5/0
Bake & Ball Shear Test	EIA/JESD22-B116	5/0
Physical Dimension	MIL-STD-883, Method 2016	5/0
Lead Integrity Test	MIL-STD-883, Method 2004	3/0
Resistance to Solvents	MIL-STD-883, Method 2015	3/0

Note 1: Moisture Characterization will confirm that there is no change to the Moisture Sensitivity Level.

# SUMITOMO BAKELITE

## SUMIKON<sup>®</sup>

EME-7351LP

BI-PHENYL RESIN  
JEDEC LEVEL 1  
LOW CTE  
LONG SPIRAL FLOW

### EME-7351LP

#### TYPICAL PROPERTIES:

<u>ITEM</u>	<u>TEST METHOD</u>	<u>UNIT</u>	<u>VALUES</u>
SPIRAL FLOW	SB-U-03-003	cm	100
GEL TIME (at 175°C)	SB-U-03-005	sec	25
THERMAL EXPANSION $\alpha_1$	SB-U-02-002	$X 10^{-5} 1/^\circ C$	1.0
THERMAL EXPANSION $\alpha_2$	SB-U-02-002	$X 10^{-5} 1/^\circ C$	4.2
T <sub>g</sub>	SB-U-02-002	°C	135
THERMAL CONDUCTIVITY	SB-U-02-004	W/m •°C	$75 \times 10^{-2}$
FLEXURAL STRENGTH	SB-U-01-001	N/mm <sup>2</sup>	
(at 25°C)			200
(at 240°C)			22
FLEXURAL MODULUS	SB-U-01-002	$X 10^2 N/mm^2$	
(at 25°C)			230
(at 240°C)			7.5
SPECIFIC GRAVITY	SB-U-03-018	-----	1.97
VOLUME RESISTIVITY	SB-U-00-004	$\Omega - cm$	$1 \times 10^{13}$
(at 150°C)			
UL FLAME CLASS	SB-U-03-003	UL-94	V-0
WATER ABSORPTION	SB-U-03-002	% weight gain	0.17
(boiling, 24 h)			
EXTRACTED Na <sup>+</sup>	SB-U-04-043	ppm	1
EXTRACTED Cl <sup>-</sup>	SB-U-04-043	ppm	10

TYPICAL, NOT GUARANTEED PROPERTIES

#### MOLDING AND POST MOLD CURE CONDITIONS:

	<u>STANDARD</u>	<u>RANGE</u>
TRANSFER PRESSURE	$85 \times 10^6 Pa$	$70-120 \times 10^6 Pa$
MOLD TEMPERATURE	175°C	165-180°C
CURE TIME (C or A)#	A/70 sec	60-120 sec
POST-MOLD CURE TEMP	175°C	170-180°C
POST-MOLD CURE TIME	6 h	4-10h

#Conventional or Auto

rev. Nov.'00

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SUMITOMO BAKELITE CO., LTD.

Tennoz Parkside Building, 5-8 Higashi-Shinagawa, 2-Chome Shinagawa-ku, Tokyo 140, Japan

# SUMITOMO BAKELITE

## SUMIKON<sup>®</sup>

EME-S351LP

BI-PHENYL RESIN  
JEDEC LEVEL 1  
LOW CTE  
LOW ALPHA RAY

## EME-S351LP

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