



## Vishay Siliconix Announces New Material of Solder Paste & Stamp Clip for Commercial Power MOSFETs in PowerPAK® SO-8 and SO-8 Package

For further information, please contact your regional Vishay office.

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**Description of Change:** To continue the supply of target commercial power MOSFETs, Vishay Siliconix announces the new solder paste, Pb95Sn5, is adopted in PowerPAK® SO-8 and SO-8 package to replace the original material, Pb88Sn10Ag2, for the yield improvement.

**Classification of Change:** Yield Improvement

**Expected Influence on Quality/Reliability/Performance:** There will be no effect on quality, reliability, performance, and the minimum/maximum values in the datasheet. The material composition of Die-Attach will be changed accordingly as shown in the following page.

**Part Numbers/Series/Families Affected:** Please see materials list on the succeeding page.

**Vishay Brand(S):** Vishay Siliconix

**Time Schedule:**

Start Shipment Date: Mon Aug 7, 2023

**Sample Availability:** Please contact your regional Vishay Sales office for sample availability

**Product Identification:** There will be no change to part numbering.

**Qualification Data:** Available upon the completion of transfer qualification testing.

**This PCN is considered approved, without further notification, unless we receive specific customer concerns before Fri Aug 4, 2023 or as specified by contract.**

**Issued By:** Andrew Tsai, andrew.tsai@vishay.com



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# Product Change Notification



Product Group: SIL/Fri May 26, 2023/PCN-SIL-018-2023-REV-0

SI7135DP-T1-GE3	SI7137DP-T1-GE3	SI7139DP-T1-GE3	SI7141DP-T1-GE3	SI7143DP-T1-GE3
SI7143DP-T1-GE3-D	SI7145DP-T1-GE3	SI7149ADP-T1-GE3	SI7149DP-T1-GE3	SI7155DP-T1-GE3
SI7157DP-T1-GE3	SI7164DP-T1-GE3	SI7172ADP-T1-RE3	SI7174DP-T1-GE3	SI7178DP-T1-GE3
SI7190ADP-T1-RE3	SI7192DP-T1-GE3	SI7336ADP-T1-E3	SI7336ADP-T1-GE3	SI7386DP-T1-E3
SI7386DP-T1-GE3	SI7390DP-T1-E3	SI7390DP-T1-GE3	SI7434ADP-T1-RE3	SI7450DP-T1-RE3
SI7454DDP-T1-GE3	SI7454FDP-T1-RE3	SI7456CDP-T1-GE3	SI7456DDP-T1-GE3	SI7463ADP-T1-GE3
SI7469ADP-T1-RE3	SI7633DP-T1-GE3	SI7634BDP-T1-E3	SI7634BDP-T1-GE3	SI7658ADP-T1-GE3
SI7686DP-T1-E3	SI7686DP-T1-GE3	SI7742DP-T1-GE3	SI7772DP-T1-GE3	SI7788DP-T1-GE3
SI7848BDP-T1-E3	SI7848BDP-T1-GE3	SI7858ADP-T1-E3	SI7858ADP-T1-GE3	SI7858BDP-T1-GE3
SI7862ADP-T1-E3	SI7862ADP-T1-GE3	SI7868ADP-T1-E3	SI7868ADP-T1-GE3	SI7880ADP-T1-E3
SI7880ADP-T1-GE3	SI7892BDP-T1-E3	SI7892BDP-T1-GE3	SIR104ADP-T1-RE3	SIR104DP-T1-RE3
SIR104LDP-T1-RE3	SIR106ADP-T1-RE3	SIR106DP-T1-RE3	SIR108DP-T1-RE3	SIR112DP-T1-RE3
SIR120DP-T1-RE3	SIR122DP-T1-RE3	SIR122LDP-T1-RE3	SIR124DP-T1-RE3	SIR1309DP-T1-GE3
SIR140DP-T1-RE3	SIR150DP-T1-RE3	SIR158DP-T1-GE3	SIR158DP-T1-RE3	SIR164ADP-T1-GE3
SIR164DP-T1-GE3	SIR164DP-T1-RE3	SIR165DP-T1-GE3	SIR166DP-T1-GE3	SIR167DP-T1-GE3
SIR170DP-T1-RE3	SIR178DP-T1-RE3	SIR180ADP-T1-RE3	SIR180DP-T1-RE3	SIR182DP-T1-RE3
SIR182LDP-T1-RE3	SIR184DP-T1-RE3	SIR184LDP-T1-RE3	SIR186DP-T1-RE3	SIR186LDP-T1-RE3
SIR188DP-T1-RE3	SIR188LDP-T1-RE3	SIR401DP-T1-GE3	SIR402DP-T1-GE3	SIR404DP-T1-GE3
SIR410DP-T1-GE3	SIR414DP-T1-GE3	SIR416DP-T1-GE3	SIR418DP-T1-GE3	SIR422DP-T1-GE3
SIR424DP-T1-GE3	SIR426DP-T1-GE3	SIR438DP-T1-GE3	SIR440DP-T1-GE3	SIR450DP-T1-RE3
SIR4602LDP-T1-RE3	SIR4604ADP-T1-GE3	SIR4604LDP-T1-GE3	SIR4608DP-T1-GE3	SIR4608LDP-T1-GE3
SIR460DP-T1-GE3	SIR462DP-T1-GE3	SIR464DP-T1-GE3	SIR466DP-T1-GE3	SIR470DP-T1-GE3
SIR470DP-T1-GE3-Z	SIR474DP-T1-GE3	SIR474DP-T1-RE3	SIR500DP-T1-RE3	SIR5102DP-T1-RE3
SIR510DP-T1-RE3	SIR512DP-T1-RE3	SIR514DP-T1-RE3	SIR516DP-T1-RE3	SIR5708DP-T1-RE3
SIR570DP-T1-RE3	SIR5710DP-T1-RE3	SIR572DP-T1-RE3	SIR574DP-T1-RE3	SIR576DP-T1-RE3
SIR578DP-T1-RE3	SIR5802DP-T1-RE3	SIR580DP-T1-RE3	SIR582DP-T1-RE3	SIR584DP-T1-RE3
SIR586DP-T1-RE3	SIR588DP-T1-RE3	SIR606BDP-T1-RE3	SIR606DP-T1-GE3	SIR608DP-T1-RE3
SIR610DP-T1-RE3	SIR622DP-T1-GE3	SIR622DP-T1-RE3	SIR624DP-T1-GE3	SIR624DP-T1-RE3
SIR626ADP-T1-RE3	SIR626DP-T1-RE3	SIR626LDP-T1-RE3	SIR632DP-T1-RE3	SIR638ADP-T1-RE3
SIR638DP-T1-GE3	SIR638DP-T1-RE3	SIR640ADP-T1-GE3	SIR662DP-T1-GE3	SIR664DP-T1-GE3
SIR668ADP-T1-RE3	SIR668DP-T1-RE3	SIR670DP-T1-GE3	SIR680ADP-T1-RE3	SIR680DP-T1-RE3
SIR680LDP-T1-RE3	SIR681DP-T1-RE3	SIR688DP-T1-GE3	SIR688DP-T1-GE3-Z	SIR690DP-T1-GE3
SIR690DP-T1-RE3	SIR692DP-T1-RE3	SIR696DP-T1-GE3	SIR800ADP-T1-GE3	SIR800ADP-T1-RE3
SIR800DP-T1-GE3	SIR800DP-T1-RE3	SIR804DP-T1-GE3	SIR818DP-T1-GE3	SIR820DP-T1-GE3
SIR826ADP-T1-GE3	SIR826BDP-T1-RE3	SIR826DP-T1-GE3	SIR826DP-T1-RE3	SIR826LDP-T1-RE3
SIR836DP-T1-GE3	SIR846ADP-T1-GE3	SIR846ADP-T1-RE3	SIR846BDP-T1-RE3	SIR846DP-T1-GE3
SIR862DP-T1-GE3	SIR870ADP-T1-GE3	SIR870ADP-T1-RE3	SIR870BDP-T1-RE3	SIR870DP-T1-GE3
SIR871DP-T1-GE3	SIR872ADP-T1-GE3	SIR872ADP-T1-RE3	SIR872DP-T1-GE3	SIR873DP-T1-GE3
SIR876ADP-T1-GE3	SIR876BDP-T1-RE3	SIR878BDP-T1-RE3	SIR880ADP-T1-GE3	SIR880BDP-T1-RE3
SIR880DP-T1-GE3	SIR882ADP-T1-GE3	SIR882BDP-T1-RE3	SIR882DP-T1-GE3	SIRA00DP-T1-GE3
SIRA00DP-T1-RE3	SIRA01DP-T1-GE3	SIRA02DP-T1-GE3	SIRA04DP-T1-GE3	SIRA04DP-T1-GE3-L
SIRA06DP-T1-GE3	SIRA10DP-T1-GE3	SIRA10DP-T1-GE3-AR	SIRA10DP-T1-GE3-G	SIRA10DP-T1-GE3-L
SIRA12DP-T1-GE3	SIRA12DP-T1-GE3-G	SIRA12DP-T1-GE3-L	SIRA12DP-T1-GE3-U	SIRA14DP-T1-GE3
SIRA14DP-T1-GE3-G	SIRA14DP-T1-GE3-U	SIRA18ADP-T1-GE3	SIRA18ADP-T1-GE3-U	SIRA18DP-T1-GE3
SIRA18DP-T1-GE3-G	SIRA18DP-T1-RE3	SIRA20DP-T1-RE3	SIRA22DP-T1-RE3	SIRA24DP-T1-GE3
SIRA26DP-T1-RE3	SIRA32DP-T1-RE3	SIRA36DP-T1-GE3	SIRA50ADP-T1-RE3	SIRA50DP-T1-RE3
SIRA52ADP-T1-RE3	SIRA52DP-T1-GE3	SIRA52DP-T1-RE3	SIRA54DP-T1-GE3	SIRA58ADP-T1-RE3
SIRA58DP-T1-GE3	SIRA60DP-T1-GE3	SIRA60DP-T1-RE3	SIRA62DP-T1-RE3	SIRA64DP-T1-GE3
SIRA64DP-T1-RE3	SIRA64DP-T1-RE3-L	SIRA66DP-T1-GE3	SIRA72DP-T1-GE3	SIRA74DP-T1-GE3
SIRA80DP-T1-RE3	SIRA80DP-T1-RE3-L	SIRA84DP-T1-GE3	SIRA84DP-T1-GE3-L	SIRA88DP-T1-GE3
SIRA88DP-T1-GE3-G	SIRA88DP-T1-GE3-L	SIRA90DP-T1-GE3	SIRA90DP-T1-RE3	SIRA99DP-T1-GE3
SIRC04DP-T1-GE3	SIRC06DP-T1-GE3	SIRC10DP-T1-GE3	SIRC16DP-T1-GE3	SIRC16DP-T1-RE3
SIRC16DP-T1-RE3-Z	SIRC18DP-T1-GE3	V30408-T1-GE3	V30412-T1-GE3	V30421-T1-GE3
V30433-T1-GE3	V30437-T1-GE3	V30447-T1-GE3	SI7234DP-T1-GE3	SI7252ADP-T1-GE3
SI7252DP-T1-GE3	SI7272DP-T1-GE3	SI7288DP-T1-GE3	SI7938DP-T1-GE3	SI7994DP-T1-GE3
SI7997DP-T1-GE3	SIRB40DP-T1-GE3	SI7998DP-T1-GE3	SI4038DY-T1-GE3	SI4056ADY-T1-GE3



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# Product Change Notification



Product Group: SIL/Fri May 26, 2023/PCN-SIL-018-2023-REV-0

SI4056DY-T1-GE3	SI4062DY-T1-GE3	SI4122DY-T1-GE3	SI4126DY-T1-GE3	SI4136DY-T1-GE3
SI4151DY-T1-GE3	SI4154DY-T1-GE3	SI4156DY-T1-GE3	SI4160DY-T1-GE3	SI4162DY-T1-GE3
SI4164DY-T1-GE3	SI4166DY-T1-GE3	SI4168DY-T1-GE3	SI4174DY-T1-GE3	SI4186DY-T1-GE3
SI4190ADY-T1-GE3	SI4368DY-T1-E3	SI4368DY-T1-GE3	SI4386DY-T1-E3	SI4386DY-T1-GE3
SI4408DY-T1-E3	SI4408DY-T1-GE3	SI4425DDY-T1-GE3	SI4425FDY-T1-GE3	SI4430BDY-T1-E3
SI4430BDY-T1-GE3	SI4434ADY-T1-GE3	SI4442DY-T1-E3	SI4442DY-T1-GE3	SI4456DY-T1-E3
SI4456DY-T1-GE3	SI4459ADY-T1-GE3	SI4459BDY-T1-GE3	SI4477DY-T1-GE3	SI4497DY-T1-GE3
SI4626ADY-T1-E3	SI4626ADY-T1-GE3	SI4630DY-T1-E3	SI4630DY-T1-GE3	SI4634DY-T1-E3
SI4634DY-T1-GE3	SI4686DY-T1-E3	SI4686DY-T1-GE3	SI4838BDY-T1-GE3	SI4838DY-T1-E3
SI4838DY-T1-GE3	SI4840BDY-T1-E3	SI4840BDY-T1-GE3	SI4842BDY-T1-E3	SI4842BDY-T1-GE3
SI4862DY-T1-E3	SI4864DY-T1-E3	SI4864DY-T1-GE3	SI4866DY-T1-E3	SI4866DY-T1-GE3
SI4202DY-T1-GE3	SI4204DY-T1-GE3	SI4288DY-T1-GE3	SI4564DY-T1-GE3	



# Product Change Notification



Product Group: Vishay Siliconix, PCN-SIL-018-2023-REV-0

**EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE:** There will be no effect on quality, reliability, performance, and the minimum/maximum values in the datasheet.

The material composition of Die-Attach will be changed accordingly as shown below:

Example of SIR668ADP-T1-RE3 (**PowerPAK SO-8**):

	Substance	CAS Number	Weight of Substance (mg)	With Respect to Homogenous Material (ppm)	With Respect to Total Product Weight (%)
<b>Before</b>	Lead*	7439-92-1	2.64000	880000	2.59 %
	Tin	7440-31-5	0.30000	100000	0.29 %
	Silver	7440-22-4	0.06000	20000	0.06 %
<b>After</b>	Lead*	7439-92-1	2.85000	950000	2.79 %
	Tin	7440-31-5	0.15000	50000	0.15 %
	Silver	7440-22-4	0.00000	0	0.00 %

\*ROHS Exemptions Used: 7(a)

Example of SI4147DY-T1-GE3 (**SO-8**):

	Substance	CAS Number	Weight of Substance (mg)	With Respect to Homogenous Material (ppm)	With Respect to Total Product Weight (%)
<b>Before</b>	Lead*	7439-92-1	11.61600	880000	12.20 %
	Tin	7440-31-5	1.32000	100000	1.39 %
	Silver	7440-22-4	0.26400	20000	0.28 %
<b>After</b>	Lead*	7439-92-1	12.54000	950000	13.17 %
	Tin	7440-31-5	0.66000	50000	0.69 %
	Silver	7440-22-4	0.00000	0	0.00 %

\*ROHS Exemptions Used: 7(a)