



Life Energy Motion

Product Change Notification

PCN-020_2023_0-OMTB2308201

Beijing, 20th April 2023

Alternative transistors

LA306, LAC, LF1005S, LF305, LF505S, LT1005, LT505, LTC1000, LTC2&400 and LTC500 series

Based on the JEDEC Standard JESD46 standard (latest release), please kindly provide your approval for below change within 30 days.

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Dear customer,

To answer to continuous market requirement for improved performances, and in a permanent effort to improve the quality of its products, LEM intends to proceed to some modification on **LA306, LAC, LF1005S, LF305, LF505S, LT1005, LT505, LTC1000, LTC2&400 and LTC500 series**.

Concerned products:

LA 306-S; LA 306-S/SP1; LA 306-S/SP2; LA 306-S/SP4;

LAC 300-S; LAC 300-S/SP1; LAC 300-S/SP10;

LAC 300-S/SP2; LAC 300-S/SP3; LAC 300-S/SP4; LAC 300-S/SP5; LAC 300-S/SP7; LAC 300-S/SP8;





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LF 1005-S; LF 1005-S/SP1; LF 1005-S/SP11; LF 1005-S/SP12;
LF 1005-S/SP13; LF 1005-S/SP14; LF 1005-S/SP15; LF 1005-S/SP16;
LF 1005-S/SP2; LF 1005-S/SP21; LF 1005-S/SP22; LF 1005-S/SP25; LF 1005-S/SP28;
LF 1005-S/SP31; LF 1005-S/SP32; LF 1005-S/SP33;
LF 1005-S/SP34; LF 1005-S/SP35; LF 1005-S/SP36; LF 1005-S/SP37; LF 1005-S/SP38;
LF 1005-S/SP41; LF 1005-S/SP43; LF 1005-S/SP45; LF 1005-S/SP46;
LF 1005-S/SP5; LF 1005-S/SP50; LF 1005-S/SP51; LF 1005-S/SP52;
LF 1005-S/SP53; LF 1005-S/SP54; LF 1005-S/SP55; LF 1005-S/SP56; LF 1005-S/SP57;

LF 305-S; LF 305-S/SP10; LF 305-S/SP11; LF 305-S/SP14; LF 305-S/SP15; LF 305-S/SP16;
LF 305-S/SP3; LF 305-S/SP6; LF 305-S/SP7; LF 305-S/SP9;

LF 505-S; LF 505-S/SP13; LF 505-S/SP15;
LF 505-S/SP2; LF 505-S/SP20; LF 505-S/SP22; LF 505-S/SP23; LF 505-S/SP25;
LF 505-S/SP26; LF 505-S/SP27; LF 505-S/SP28;
LF 505-S/SP30; LF 505-S/SP34; LF 505-S/SP36; LF 505-S/SP38; LF 505-S/SP39; LF 505-S/SP40;
LF 505-S/SP5; LF 505-S/SP6; LF 505-S/SP9;

LT 1005-S; LT 1005-S/SP1; LT 1005-S/SP10; LT 1005-S/SP19;
LT 1005-S/SP2; LT 1005-S/SP22; LT 1005-S/SP24;
LT 1005-S/SP26; LT 1005-S/SP28; LT 1005-S/SP29;
LT 1005-S/SP3; LT 1005-S/SP30; LT 1005-S/SP32; LT 1005-S/SP33;
LT 1005-S/SP36; LT 1005-S/SP38;
LT 1005-S/SP4; LT 1005-S/SP40; LT 1005-S/SP41; LT 1005-S/SP8;
LT 1005-T; LT 1005-T/SP13; LT 1005-T/SP3; LT 1005-T/SP31; LT 1005-T/SP39; LT 1005-T/SP4;

LT 505-S; LT 505-S/SP10; LT 505-S/SP12;
LT 505-S/SP22; LT 505-S/SP24; LT 505-S/SP3; LT 505-S/SP32; LT 505-S/SP34; LT 505-S/SP35;
LT 505-S/SP4; LT 505-S/SP5; LT 505-S/SP8;
LT 505-T; LT 505-T/SP12; LT 505-T/SP20; LT 505-T/SP22;





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LTC 1000-S; LTC 1000-S/SP1; LTC 1000-S/SP15;
LTC 1000-S/SP2; LTC 1000-S/SP25; LTC 1000-S/SP26; LTC 1000-S/SP28; LTC 1000-S/SP29;
LTC 1000-S/SP35; LTC 1000-S/SP5;
LTC 1000-SC/SP27; LTC 1000-SC/SP6;
LTC 1000-SF; LTC 1000-SF/SP10;
LTC 1000-SF/SP13; LTC 1000-SF/SP14; LTC 1000-SF/SP15; LTC 1000-SF/SP19;
LTC 1000-SF/SP23; LTC 1000-SF/SP24; LTC 1000-SF/SP26; LTC 1000-SF/SP29;
LTC 1000-SF/SP3; LTC 1000-SF/SP31; LTC 1000-SF/SP33; LTC 1000-SF/SP34;
LTC 1000-SF/SP4; LTC 1000-SF/SP8;
LTC 1000-SFC/SP1; LTC 1000-SFC/SP2;
LTC 1000-T; LTC 1000-T/SP22;
LTC 1000-TF; LTC 1000-TF/SP14;

LTC 200-S; LTC 200-S/SP1; LTC 200-SF/SP2;

LTC 350-S; LTC 350-S/SP5;
LTC 350-SF; LTC 350-SF/SP5;
LTC 350-SFC/SP1;
LTC 350-T; LTC 350-TF;

LTC 400-S; LTC 400-SF;

LTC 500-S; LTC 500-S/SP3; LTC 500-S/SP5; LTC 500-S/SP6;
LTC 500-SF; LTC 500-SF/SP6; LTC 500-SF/SP7;
LTC 500-SFC/SP2;
LTC 500-T;
LTC 500-TF;

LTC 600-S; LTC 600-S/SP1; LTC 600-S/SP15; LTC 600-S/SP17; LTC 600-S/SP2; LTC 600-S/SP5;
LTC 600-SF; LTC 600-SF/SP20; LTC 600-SF/SP5; LTC 600-SF/SP6;
LTC 600-SFC/SP1; LTC 600-SFC/SP14;





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LTC 600-T; LTC 600-T/SP10; LTC 600-T/SP12; LTC 600-T/SP16;
LTC 600-TF; LTC 600-TF/SP18; LTC 600-TF/SP19; LTC 600-TF/SP21;

Change:

➤ ***Description of the technical change:***

New second sources transistors.

Current transistors:

ON-Semi: MJD31CT4G: Trans GP BJT NPN 100V 3A 1560mW 3-Pin(2+Tab) DPAK T/R

STMicroelectronics: MJD31CT4: Trans GP BJT NPN 100V 3A 15000mW 3-Pin(2+Tab) DPAK T/R

ON-Semi: MJD32CT4G: Trans GP BJT PNP 100V 3A 1560mW 3-Pin(2+Tab) DPAK T/R

STMicroelectronics: MJD32CT4: Trans GP BJT PNP 100V 3A 15000mW 3-Pin(2+Tab) DPAK T/R

New second sources transistors:

Micro Commercial Components: MJD31C-TP: Trans GP BJT NPN 100V 3A 1250mW 3-Pin(2+Tab)
DPAK T/R

Nexperia: MJD31CJ: 100 V, 3 A NPN high power bipolar transistor

Micro Commercial Components: MJD32C-TP: Trans GP BJT PNP 100V 3A 1250mW 3-Pin(2+Tab)
DPAK T/R

Nexperia: MJD32CJ: 100 V, 3 A PNP high power bipolar transistor

Data sheets of the current and second sources transistors are enclosed in annex files.

Comparisons between current and second sources transistors are enclosed in annex files.

➤ ***Reason of the technical change:***

Securing the supplying with second sources. Delivery shortage risk.





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Impact on the product:

- On the form: NO
- On the fit: NO
- On the function: NO
- On the reliability: NO
- On the data sheet: NO
- On the process: NO
- On the quality: NO

Schedule of the modification:

Start of delivery of modified product	End September 2023
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Customer feedback:

To ensure a smooth change, and in order to answer to any of your requirements issued by this change, please fill in the **Customer Return Sheet** (Annex 1 on page 7) and send it back to us **following 30 days at the latest.**

In case we do not receive any answer **following 30 days at the latest**, we will assume:

- Your acceptance to the change.
- No need for samples
- No additional need.

Please return the Customer Return Sheet to:

LEM

Mail to:

After customer acknowledgement, lack of additional customer response within the time defined until the change implementation constitutes acceptance of the change by the customer.

Sincerely yours,

Stéphane ROLLIER

Product Manager





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Customer Return Sheet

Annex 1

part of

PCN-020_2023_0-OMTB2308201

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To: LEM

From:

Mail to:

Company:

Fax:

With this Customer Return Sheet, LEM asks you to fill in the requested information below.

**Please return this sheet to LEM in the following 30 days at the latest.
In case no answer will be received, your confirmation and no request for samples will be assumed.**





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Documentation required from LEM to release changed parts for delivery:

- Detailed Qualification tests report.
- (others, please specify).

Request for Samples

We ask you to fill in below if and how many samples you will need for own evaluation tests.

	Samples needed for customer approval tests
Type	
No. of Samples	
Delivery Date	

.....
(Date)

.....
(Authorized Customer) (Signature)

