



FUTURE ELECTRONICS

From: Phil Maillet
Director of Supplier Quality Management
DATE: March 1, 2022

SUBJECT: Ukraine Invasion

Dear Customer,

At this time, Future Electronics is not conducting any business or shipping to entities in Russia, Belarus or the Ukraine. Following is a statement from our supplier related to the crisis in Ukraine.

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Future Electronics Director Supplier Quality / Quality Technology
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Expertise Applied | Answers Delivered

March 14, 2022

Littelfuse, Inc.
8755 West Higgins Road, Suite 500
Chicago, IL 60631 USA
(773) 628-1000

Dear Valued Customer,

Like so many of you, we are deeply saddened by the events and images coming from the war in Ukraine and condemn what we strongly believe to be an unjustified and unprovoked invasion by Russia.

We are announcing today that we will suspend all business activities within the Russian Federation, impacting both sales of products and the supply of materials from Russia.

As consequence of this decision, supply of certain products will be impacted by disruption to our supply chains, namely:

- 1) Certain Schottky Gen¹ and Gen² diode discrete products including DSA, DSB, DSS, DSSK and FUS series in all packages.
- 2) Certain bipolar power module products including MCC, MCD, MDD, MCR, MCA, MCK, MDA, MDK and MDO series products in 50mm, 60mm, 70mm and 77mm pressure contact module packages. *Please note that solder contact modules are not impacted.* At this time, we have very limited alternative options.
- 3) Certain high power (hockey puck) thyristor products including N series 19mm, 25mm and 34mm electrode diameter. In most cases alternative options are available. Please contact your local representative for assistance.

Further details of the products impacted can be found in the appendix to this letter.

We continue to work to establish alternative supply chains and/or replacement products as fast as possible. We will provide updated information on these activities at the earliest opportunity.

In the interim, we may be able to support you with alternative solutions to the problems this action inevitably creates and our local teams will do all they can to support your business.

We apologize for the disruption that this causes and certainly do not take this decision lightly.

For further information and support, please contact your local representative.

Sincerely,

Chad Marak
Vice President and General Manager
Power Semiconductor and Integrated Circuits
Littelfuse, Inc.

Appendix I – List of impacted parts

<i>Schottky Gen1</i>		<i>Schottky Gen2</i>	
DSS 40-0008D	DSSK 30-018A	DSA 10C150PB	DSA 30C45PC
DSSK 80-0008D	DSSK 30-01A	DSA 10C150UC	DSA 30C60PB
DSS 10-0045B	DSSK 38-0025B	DSA 10I100PM	DSA 30I100PA
DSS 10-006A	DSSK 38-0025BS	DSA 10IM100UC	DSA 30I150PA
DSS 10-01A	DSSK 40-0015B	DSA 120C150QB	DSA 50C100HB
DSS 10-01AS	DSSK 40-006B	DSA 120X150LB	DSA 50C100QB
DSS 16-0045A	DSSK 40-008B	DSA 120X200LB	DSA 50C150HB
DSS 16-0045AS	DSSK 48-0025B	DSA 15I45PA	DSA 60C100PB
DSS 16-01A	DSSK 48-003B	DSA 15IM150UC	DSA 60C150PB
DSS 16-01AS	DSSK 48-003BS	DSA 15IM200UC	DSA 60C45HB
DSS 20-0015B	DSSK 50-0025B	DSA 15IM45IB	DSA 60C45PB
DSS 20-01AC	DSSK 50-015A	DSA 15IM45UC	DSA 60C60HB
DSS 25-0025B	DSSK 50-01A	DSA 20C100PB	DSA 60C60PB
DSS 25-0045A	DSSK 60-0045A	DSA 20C100PN	DSA 70C100HB
DSS 2x101-015A	DSSK 60-0045B	DSA 20C150PB	DSA 70C150HB
DSS 2x101-02A	DSSK 60-015A	DSA 20C150PN	DSA 70C200HB
DSS 2x111-008A	DSSK 60-015AR	DSA 20C200PB	DSA 80C100PB
DSS 2x121-0045B	DSSK 60-02A	DSA 20C45PB	DSA 80C45HB
DSS 2x160-0045A	DSSK 60-02AR	DSA 20C60PB	DSA 90C200HB
DSS 2x160-01A	DSSK 70-0015B	DSA 20C60PN	DSA 90C200HR
DSS 2x200-0008D	DSSK 70-003B	DSA 240X150NA	DSB 10I45PM
DSS 2x41-01A	DSSK 70-008A	DSA 240X200LB	DSB 15IM30UC
DSS 2x61-0045A	DSSK 70-008AR	DSA 240X200NA	DSB 15IM45IB
DSS 2x61-01A	DSSK 80-0025B	DSA 300I100NA	DSB 20C60PN
DSS 2x81-0045B	DSSK 80-003B	DSA 300I200NA	DSB 20I15PA
DSS 60-0045B	DSSK 80-0045B	DSA 300I45NA	DSB 30C30PB
DSS 6-0025BS	DSSK 80-006B	DSA 30C100HB	DSB 30C45HB
DSS 6-0045AS	DSSK 80-006BR	DSA 30C100PB	DSB 30C45PB
DSS 6-015AS	DSSS 30-01AR	DSA 30C100PN	DSB 30C60PB
DSSK 10-018A	DSSS 35-008AR	DSA 30C100QB	DSB 40C15PB
DSSK 16-01A	FUS 45-0045B	DSA 30C150HB	DSB 60C30HB
DSSK 16-01AS		DSA 30C150PB	DSB 60C30PB
DSSK 18-0025BS		DSA 30C150PC	DSB 60C45HB
DSSK 20-0045B		DSA 30C200IB	DSB 60C45PB
DSSK 20-015A		DSA 30C200PB	DSB 60C60HB
DSSK 28-0045BS		DSA 30C200PC	DSB 60C60PB
DSSK 28-006BS		DSA 30C45HB	DSB 80C45HB
DSSK 28-01AS		DSA 30C45PB	

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<i>Pressure contact thyristor / diode modules</i>				
MCA500-14io1	MCC720-18io7	MCK700-14io1W	MDC320-30io2	MDD410-28N3
MCA500-18io1	MCD160-30io3	MCK700-18io1W	MDC320-36io2	MDD510-14N3
MCA500-22io1	MCD160-36io3	MCO560-30io1	MDC325-14io3	MDD510-18N3
MCA550-12io1	MCD220-28io3	MCO560-36io1	MDC325-18io3	MDD600-14N1
MCA550-16io1	MCD265-24io3	MCO635-28io1	MDC380-28io2	MDD600-18N1
MCA600-22io1W	MCD320-30io2	MCO741-22io1	MDC431-20io2	MDD600-22N1
MCA700-14io1W	MCD320-36io2	MCO801-14io1	MDC431-22io2	MDD630-30N2
MCA700-18io1W	MCD325-14io3	MCO801-18io1	MDC431-24io2	MDD630-36N2
MCC160-30io3	MCD325-18io3	MCR500-30io7	MDC500-14io1	MDD950-14N1W
MCC160-36io3	MCD380-28io2	MCR500-36io7	MDC500-18io1	MDD950-18N1W
MCC220-28io3	MCD431-20io2	MCR580-28io7	MDC500-22io1	MDD950-22N1W
MCC265-24io3	MCD431-22io2	MCR650-24io7	MDC500-30io7	MDK 710-22N2
MCC320-30io2	MCD431-24io2	MCR720-14io7	MDC500-36io7	MDK 710-26N2
MCC320-36io2	MCD500-14io1	MCR720-18io7	MDC501-12io2	MDK 810-12N2
MCC325-14io3	MCD500-18io1	MDA 710-22N2	MDC501-14io2	MDK 810-16N2
MCC325-18io3	MCD500-22io1	MDA 710-26N2	MDC501-16io2	MDK 810-18N2
MCC380-28io2	MCD500-30io7	MDA 810-12N2	MDC501-18io2	MDK1080-18N7
MCC431-20io2	MCD500-36io7	MDA 810-16N2	MDC550-12io1	MDK1080-24N7
MCC431-22io2	MCD501-12io2	MDA 810-18N2	MDC550-16io1	MDK1080-28N7
MCC431-24io2	MCD501-14io2	MDA1080-18N7	MDC552-12io2	MDK275-30N3
MCC500-14io1	MCD501-16io2	MDA1080-24N7	MDC552-14io2	MDK275-36N3
MCC500-18io1	MCD501-18io2	MDA1080-28N7	MDC552-16io2	MDK410-24N3
MCC500-22io1	MCD550-12io1	MDA275-30N3	MDC580-28io7	MDK410-28N3
MCC500-30io7	MCD550-16io1	MDA275-36N3	MDC600-22io1W	MDK510-14N3
MCC500-36io7	MCD552-12io2	MDA410-24N3	MDC650-24io7	MDK510-18N3
MCC501-12io2	MCD552-14io2	MDA410-28N3	MDC700-14io1W	MDK600-14N1
MCC501-14io2	MCD552-16io2	MDA510-14N3	MDC700-18io1W	MDK600-18N1
MCC501-16io2	MCD580-28io7	MDA510-18N3	MDC720-14io7	MDK600-22N1
MCC501-18io2	MCD600-22io1W	MDA600-14N1	MDC720-18io7	MDK630-30N2
MCC550-12io1	MCD650-24io7	MDA600-18N1	MDD 710-22N2	MDK630-36N2
MCC550-16io1	MCD700-14io1W	MDA600-22N1	MDD 710-26N2	MDK950-14N1W
MCC552-12io2	MCD700-18io1W	MDA630-30N2	MDD 810-12N2	MDK950-18N1W
MCC552-14io2	MCD720-14io7	MDA630-36N2	MDD 810-16N2	MDK950-22N1W
MCC552-16io2	MCD720-18io7	MDA950-14N1W	MDD 810-18N2	MDO1120-24N1
MCC580-28io7	MCK500-14io1	MDA950-18N1W	MDD1080-18N7	MDO1120-28N1
MCC600-22io1W	MCK500-18io1	MDA950-22N1W	MDD1080-24N7	MDO1201-14N1
MCC650-24io7	MCK500-22io1	MDC160-30io3	MDD1080-28N7	MDO1201-18N1
MCC700-14io1W	MCK550-12io1	MDC160-36io3	MDD275-30N3	MDO1201-22N1
MCC700-18io1W	MCK550-16io1	MDC220-28io3	MDD275-36N3	
MCC720-14io7	MCK600-22io1W	MDC265-24io3	MDD410-24N3	

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<i>Press Pack (hockey puck) Thyristor</i>
N0465WN140-160
N0530YN220-250
N0795YN140-180
N1075LN180
N1140LN140

Material	Description
DSS2X101-015A	Pwr Diode Disc-Schottky SOT-227B minibl
DSSK80-0025B	Power Diode Discretes-Schottky TO-247AD
DSS2X61-01A	Pwr Diode Disc-Schottky SOT-227B minibl
DSSS35-008AR	Power Diode Disc-Schottky ISOPLUS247
DSSK60-02A	Power Diode Discretes-Schottky TO-247AD
DSA30I100PA	Power Diode Discretes-Schottky TO-220AC
DSS2X111-008A	Pwr Diode Disc-Schottky SOT-227B minibl
DSS2X101-02A	Pwr Diode Disc-Schottky SOT-227B minibl
DSS2X121-0045B	Pwr Diode Disc-Schottky SOT-227B minibl
DSSK20-015A	Pwr Diode Disc-SchottkyTO-220AB/TO-220FP
DSS10-0045B	Power Diode Discretes-Schottky TO-220AC
DSS2X41-01A	Pwr Diode Disc-Schottky SOT-227B minibl
DSA80C100PB	Pwr Diode Disc-SchottkyTO-220AB/TO-220FP
DSS16-01A	Power Diode Discretes-Schottky TO-220AC
DSS10-01A	Power Diode Discretes-Schottky TO-220AC
DSA70C150HB	Power Diode Discretes-Schottky TO-247AD
DSS2X61-0045A	Pwr Diode Disc-Schottky SOT-227B minibl
DSSK30-01A	Power Diode Discretes-Schottky TO-247AD
DSA70C200HB	Power Diode Discretes-Schottky TO-247AD
DSS6-015AS-TRL	Power Diode Discretes-Schottky TO-252D
DSSK80-0045B	Power Diode Discretes-Schottky TO-247AD
DSA30I150PA	Power Diode Discretes-Schottky TO-220AC
DSSK20-0045B	Pwr Diode Disc-SchottkyTO-220AB/TO-220FP
DSA60C60HB	Power Diode Discretes-Schottky TO-247AD
DSSK70-008A	Power Diode Discretes-Schottky TO-247AD
DSA70C100HB	Power Diode Discretes-Schottky TO-247AD