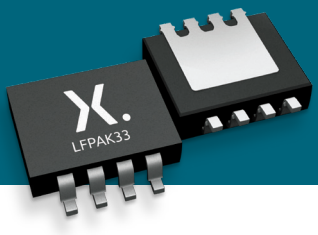
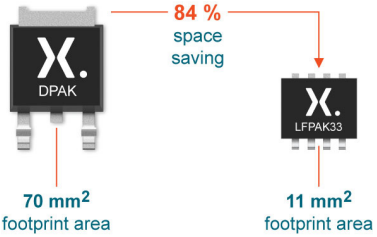


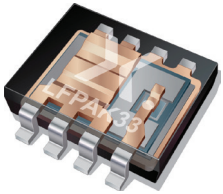
LFPAK33
shrinking the power footprint

The LFPAK33 brings Nexperia's **robust and reliable copper clip technology** to the Power33 (3.3 mm x 3.3 mm) footprint, qualified to AEC-Q101 standards.

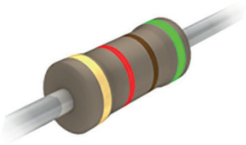
Compact Footprint



- Ultra-compact footprint - 11 mm²
- Ultra-low height <1 mm
- Footprint >84% smaller than DPAK

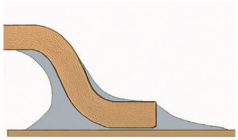


Ultra Low On-Resistance



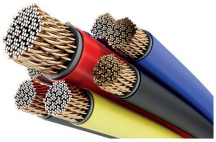
- 3.3 mΩ @ 40V
- Copper clip technology
- Ultra-low package resistance

Reliable & Manufacturable



- High board level reliability
- Easy optical inspection
- Robust solder joints

High Current Rating



- Best-in-class current rating
- Up to 80 A per device
- High transient robustness

nexperia

EFFICIENCY WINS.

LFPAK33 Product Range (AEC-Q101 qualified)

Product Name	V_{DS} [max] (V)	Gate Level	R_{DSon} [max] @ V_{GS} = 10 V (mΩ)	R_{DSon} [max] @ V_{GS} = 5 V (mΩ)	I_D [max] @ 25°C (A)	$R_{th(j-mb)}$ [max] (K/W)
BUK9M5R2-30E	30	LL		5.2	70	1.89
BUK9M6R6-30E	30	LL		6.6	70	2
BUK9M10-30E	30	LL		10	59	2.75
BUK9M17-30E	30	LL		17	39	3.4
BUK7M6R3-40E	40	SL	6.3		70	1.89
BUK9M7R2-40E	40	LL		7.2	70	1.89
BUK7M8R0-40E	40	SL	8		70	2
BUK9M9R1-40E	40	LL		9.1	66	2
BUK7M10-40E	40	SL	10		60	2.43
BUK9M11-40E	40	LL		11	56	2.43
BUK7M12-40E	40	SL	12		52	2.75
BUK9M14-40E	40	LL		14	48	2.75
BUK7M21-40E	40	SL	21		35	3.4
BUK9M24-40E	40	LL		24	31	3.4
BUK7M45-40E	40	SL	45		21	4.8
BUK9M52-40E	40	LL		52	19	4.8
BUK7M9R9-60E	60	SL	9.9		60	1.89
BUK9M12-60E	60	LL		12	54	1.89
BUK7M12-60E	60	SL	12		54	2
BUK9M15-60E	60	LL		15	49	2
BUK7M15-60E	60	SL	15		46	2.43
BUK9M19-60E	60	LL		19	40	2.43
BUK7M19-60E	60	SL	19		39	2.75
BUK9M24-60E	60	LL		24	34	2.75
BUK7M33-60E	60	SL	33		26	3.4
BUK9M42-60E	60	LL		42	23	3.4
BUK7M42-60E	60	SL	42		21	4.17
BUK9M53-60E	60	LL		53	19	4.17
BUK7M67-60E	60	SL	67		16	4.8
BUK9M85-60E	60	LL		85	14	4.8
BUK7M17-80E	80	SL	17		43	1.89
BUK7M22-80E	80	SL	22		38	2

Product Name	V_{DS} [max] (V)	Gate Level	R_{DSon} [max] @ V_{GS} = 10 V (mΩ)	R_{DSon} [max] @ V_{GS} = 5 V (mΩ)	I_D [max] @ 25°C (A)	$R_{th(j-mb)}$ [max] (K/W)
BUK9M23-80E	80	LL		23	37	1.89
BUK7M27-80E	80	SL	27		32	2.43
BUK9M28-80E	80	LL		28	34	2
BUK9M35-80E	80	LL		35	28	2.43
BUK9M34-100E	100	LL		34	28	1.89
BUK9M43-100E	100	LL		43	26	2
BUK9M120-100E	100	LL		120	12	3.4
BUK9M156-100E	100	LL		156	10	4.17

The latest Trench 9 silicon technology:

Device	Gate Level	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 4.5 V (mΩ)	ID [Max] (A)	Rth (j-mb) [max] (K/W)	$Q_{G(tot)}$ [Typ] @ VGS = 10 V
BUK7M3R3-40H	SL	40	3.3		80	1.48	32
BUK9M3R3-40H	LL	40		4.2	80	1.48	39
BUK7M6R0-40H	SL	40	6		50	2.14	20
BUK9M6R0-40H	LL	40		7.7	50	2.14	26
BUK7M6R7-40H	SL	40	6.7		50	2.32	17
BUK9M6R7-40H	LL	40		8.6	50	2.32	22
BUK7M8R5-40H	SL	40	8.5		40	2.56	14
BUK9M8R5-40H	LL	40		11	40	2.56	20
BUK7M9R5-40H	SL	40	9.5		40	2.74	13
BUK9M9R5-40H	LL	40		12	40	2.74	17
BUK7M11-40H	SL	40	11		35	3.01	11
BUK9M11-40H	LL	40		14	35	3.01	15
BUK7M15-40H	SL	40	15		30	3.44	9
BUK9M15-40H	LL	40		19	30	3.44	12
BUK7M20-40H	SL	40	20		25	3.96	7
BUK9M20-40H	LL	40		25	25	3.96	9

Date of release:
February 2019