

Featured Products



Super Junction MOSFET

High Voltage 650V Power MOSFETs Featuring Low Noise with Superior Efficiency

R65xxENx/R65xxKNx series

High 650V withstand voltage (V_{DS}), low ON resistance ($R_{DS(on)}$)

Low noise equivalent to planar MOSFETs (R65xxEN series)

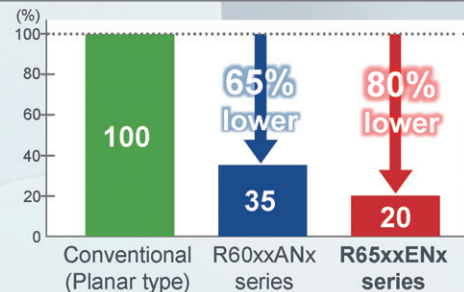
High-speed switching, high efficiency (R65xxKNx series)

Applications

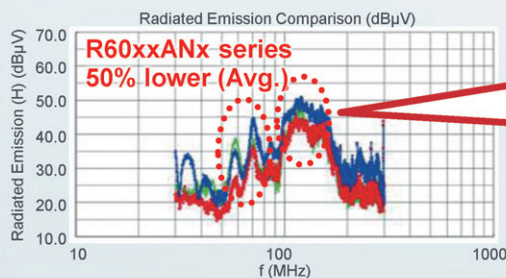
- Industrial equipment
- Switching power supplies
 - TVs • AC • Refrigerators
 - Washing Machines • Audio etc.
- Lighting equipment

Ideal for Noise Countermeasures R65xxENx series

Low Noise



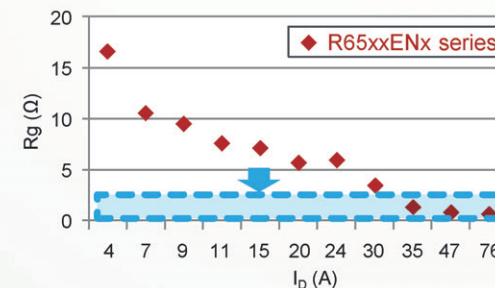
Significantly lower ON resistance increases efficiency



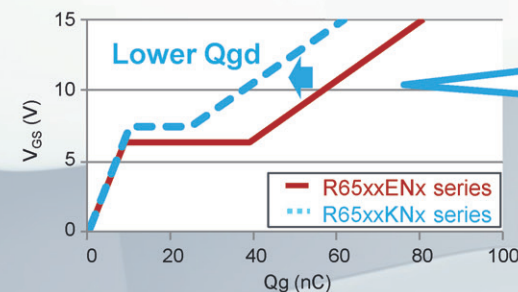
Original structure delivers low noise (a weakness of Super Junction MOSFETs) equivalent to planar types

Emphasis on High Efficiency R65xxKNx series

High-Speed Switching








High efficiency achieved through low gate resistance









Low Qg enables high-speed switching

Low Noise type R65xxENx series

Package	Part No.	V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) V _{GS} =10V		Qg(nC) V _{GS} =10V Typ
				Typ	Max	
TO-252 (DPAK) 	New R6502END3	650	1.7	3.050	4.000	6.5
	New R6504END3		4	0.955	1.050	15
	New R6507END3		7	0.605	0.665	20
	New R6509END3		9	0.530	0.585	24
	New R6511END3		11	0.360	0.400	32
TO-263 (LPTS) [SC-83] (D2PAK) 	R6504ENJ	650	4	0.955	1.050	15
	R6507ENJ		7	0.605	0.665	20
	R6509ENJ		9	0.530	0.585	24
	R6511ENJ		11	0.360	0.400	32
	R6515ENJ		15	0.280	0.315	40
	R6520ENJ		20	0.185	0.205	61
TO-220FM (TO-220FP) 	R6524ENJ		24	0.160	0.185	70
	R6504ENX	650	4	0.955	1.050	15
	R6507ENX		7	0.605	0.665	20
	R6509ENX		9	0.530	0.585	24
	R6511ENX		11	0.360	0.400	32
	R6515ENX		15	0.280	0.315	40
	R6520ENX		20	0.185	0.205	61
	R6524ENX		24	0.160	0.185	70
TO-247AD (TO-247) 	R6530ENX		30	0.125	0.140	90
	R6520ENZ4	650	20	0.185	0.205	61
	R6524ENZ4		24	0.160	0.185	70
	R6530ENZ4		30	0.125	0.140	90
	R6535ENZ4		35	0.098	0.115	110
	R6547ENZ4		47	0.070	0.080	150
TO-3PF (TO-3PF) 	R6576ENZ4		76	0.040	0.046	260
	R6520ENZ	650	20	0.185	0.205	61
	R6524ENZ		24	0.160	0.185	70
	R6530ENZ		30	0.125	0.140	90
	R6535ENZ		35	0.098	0.115	110

*Package is JEDEC code. (): ROHM Packages, []: JEITA code, < >: GENERAL code.

High-Speed Switching type R65xxKNx series

Package	Part No.	V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) V _{GS} =10V		Qg(nC) V _{GS} =10V Typ
				Typ	Max	
TO-252 (DPAK) 	New R6504KND3	650	4	0.955	1.050	10
	New R6507KND3		7	0.605	0.665	15
	New R6509KND3		9	0.530	0.585	16.5
	New R6511KND3		11	0.360	0.400	22
TO-263 (LPTS) [SC-83] (D2PAK) 	R6504KNJ		4	0.955	1.050	10
	R6507KNJ		7	0.605	0.665	15
	R6509KNJ		9	0.530	0.585	16.5
	R6511KNJ		11	0.360	0.400	22
	R6515KNJ		15	0.280	0.315	30
	R6520KNJ		20	0.185	0.205	40
TO-220AB 	R6524KNJ		24	0.160	0.185	46
	New R6515KNX3	650	15	0.280	0.315	27.5
	New R6520KNX3		20	0.185	0.205	40
	New R6524KNX3		24	0.160	0.185	45
	New R6530KNX3		30	0.125	0.140	56
(TO-220FM) (TO-220FP) 	New R6535KNX3		35	0.098	0.115	72
	R6504KNX	650	4	0.955	1.050	10
	R6507KNX		7	0.605	0.665	14.5
	R6509KNX		9	0.530	0.585	16.5
	R6511KNX		11	0.360	0.400	22
	R6515KNX		15	0.280	0.315	30
	R6520KNX		20	0.185	0.205	40
	R6524KNX		24	0.160	0.185	46
TO-247AD (TO-247) 	R6530KNX		30	0.125	0.140	56
	R6520KNZ4	650	20	0.185	0.205	40
	R6524KNZ4		24	0.160	0.185	45
	R6530KNZ4		30	0.125	0.140	56
	R6535KNZ4		35	0.098	0.115	72
	R6547KNZ4		47	0.070	0.080	100
(TO-3PF) (TO-3PF) 	R6576KNZ4		76	0.040	0.046	165
	R6515KNZ	650	15	0.280	0.315	27.5
	R6520KNZ		20	0.185	0.205	40
	R6524KNZ		24	0.160	0.185	45
	R6530KNZ		30	0.125	0.140	56
	R6535KNZ		35	0.098	0.115	72

*Package is JEDEC code. (): ROHM Packages, []: JEITA code, < >: GENERAL code.

The content specified in this document is correct as of 1st January, 2021.