

Line-up and Main Specifications of New MOSFETs:

(Unless otherwise specified, Ta=25 °C)

Part Number	Polarity	Absolute Maximum Ratings		Drain-source On-resistance R _{DS(ON)} max (mΩ)		Total Gate Charge Q _g typ. (nC)	Output Charge Q _{oss} typ. (nC)	Gate Switch Charge Q _{sw} typ. (nC)	Input Capacitance C _{iss} typ. (pF)	Package
		Drain-source Voltage V _{DSS} (V)	Drain Current (DC) I _D (A) @T _c = 25°C	@V _{GS} =10 V	@V _{GS} =4.5 V					
TPH7R204PL ^[4]			48	7.2	9.7	24	16	6.9	1570	SOP Advance
TPH6R004PL ^[4]			49	6.0	8.4	30	20	9	2100	SOP Advance
TPH3R704PC ^[4]			82	3.7	5.8	47	28	14	2780	SOP Advance
TPH2R104PL ^[4]			100	2.1	3.1	78	46	21	4790	SOP Advance
TPHR8504PL ^[4]			150	0.85	1.4	103	85.4	23	7370	SOP Advance
TPN7R504PL ^[4]			38	7.5	10	24	16	6.9	1570	TSON Advance
TK3R1E04PL ^[4]		40	100	3.1	3.8	63.4	42	17.5	4670	TO-220
TK3R1A04PL ^[4]			82	3.1	3.8	63.4	42	17.5	4670	TO-220SIS
TPWR8004PL ^[4]			150	0.80	1.35	103	85.4	23	7370	DSOP Advance
TPN3R704PL	N-ch		80	3.7	6.0	27	20.2	8.1	1910	TSON Advance
TPN2R304PL			80	2.3	4.0	41	27	10.8	2750	TSON Advance
TPH3R704PL			92	3.7	6.0	27	20.2	8.1	1910	SOP Advance
TPH1R204PL			150	1.24	2.1	74	56	17	5500	SOP Advance
TPH2R805PL ^[4]			100	2.8	3.9	73	55	22	3980	SOP Advance
TPH1R405PL ^[4]			120	1.4	2.3	74	67	22	4830	SOP Advance
TPH1R005PL ^[4]		45	150	1.04	1.7	122	98	34	7700	SOP Advance
TPN2R805PL ^[4]			80	2.8	5.0	39	32	12	2450	TSON Advance
TPW1R005PL ^[4]			150	0.99	1.65	122	98	34	7700	DSOP Advance

Main Features

1. Industry's leading-class^[1] low on-resistance
 $R_{DS(ON)} = 0.80 \text{ m}\Omega$ (max) @ $V_{GS} = 10\text{V}$ (TPWR8004PL)
 $R_{DS(ON)} = 0.99 \text{ m}\Omega$ (max) @ $V_{GS} = 10\text{V}$ (TPW1R005PL)
2. Low output charge
3. High-speed performance
4. Low switching noise
5. Supports 4.5 V logic level drive

Notes

[1] In the category of products with the same ratings, as of December 9, 2016. Toshiba survey.

[2] $R_{DS(ON)}$: Drain-source on-resistance

Q_{sw} : Gate switch charge

[3] Toshiba products using the previous generation U-MOS VIII-H process

[4] New product