

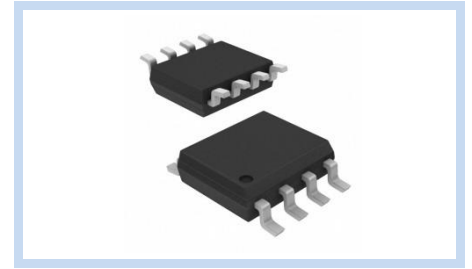
MOSFET TSOP8 Package

MFT-TS8 series

MERITEK

FEATURE

- Operating and Storage Temperature: -50°C ~ +150°C
- Fast Switching Characteristics
- Improved dv/dt Capability



PART NUMBERING SYSTEM

MFT **6** **N** **14** **TS8S**
 (1) (2) (3) (4) (5)

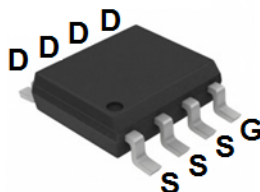


No	Item	Code	Part Description	Series Reference
(1)	Meritek Series	MFT	Meritek MOSFET Series	Surface Mount Type
(2)	Voltage Rating	6	6: 60V	Drain-Source Voltage, 10:100V
(3)	FET Type	N	N: Single N Channel	P-Channel, Dual N-Channel, Dual P-Channel, Dual N+P-Channel MOSFET
(4)	Current Rating	14	14: 14A	Continuous Drain Current, T _C =25°C
(5)	Internal Code	TS8S	Internal Control Reference	Package or Project Reference

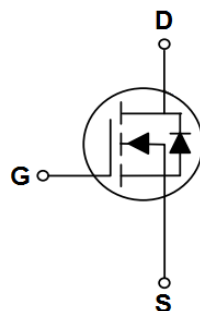
SURFACE MOUNT MOSFET PACKAGE REFERENCE TABLE

Series	FET Type	Channel/ Feature	Continuous Drain Current (I _D) @ 25°C	R _{DS(ON)} Max. @ 4.5 V _{GS}	Power Dissipation (P _D) @25°C	Drain to Source Voltage (V _{DS})
MFT(N)-TS8	N	Single	4 ~ 30A	6 ~ 80mΩ	1.47 ~ 10.4W	30V, 40V, 60V, 65V, 80V, 100V, 150V
MFT(P)-TS8	P	Single	5.5 ~ 24A	7.8 ~ 90mΩ	2 ~ 4.2W	-20V, -30V, -40V, -60V
MFT(2N)-TS8	N+N	Dual	4.5 ~ 20A	15 ~ 63mΩ	2 ~ 2.1W	30V, 40V, 60V
MFT(2P)-TS8	P+P	Dual	7 ~ 10A	26 ~ 36mΩ	2.1W	-30V
MFT(NP)-TS8	N+P	Dual	1.7 ~ 10A	18 ~ 340mΩ	2.5 ~ 5W	-30V, 30V, -40V, 40V, -60V, 60V, -100V, 100V

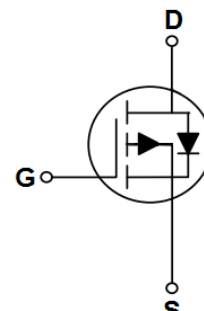
PIN CONFIGURATION



TSOP8 Single



Single N Type



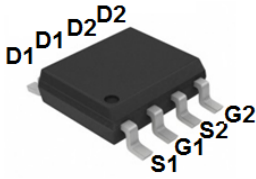
Single P Type

MOSFET TSOP8 Package

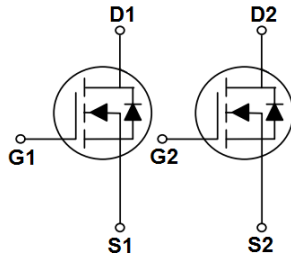
MFT-TS8 series

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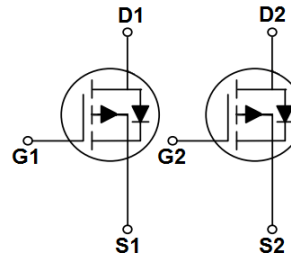
PIN CONFIGURATION CONTINUED



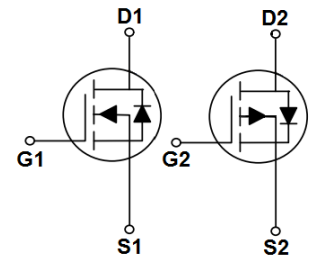
TSOP8 Dual



Dual N Type



Dual P Type



Dual N+P Type

ELECTRICAL CHARACTERISTICS

MFT(N)-TS8 Series – Single N Channel Type

Part Number	V _{DS} (V)	I _D (A)		V _{GS} (V)	R _{DS(ON)} (mΩ) max. at V _{GS}		Q _g (nC)		C _{ISS} (pF)	P _D (W) @25°C	T _s , T _J (°C)
		25°C	100°C		10V	4.5V	10V	4.5V			
MFT3N30TS8S	30	30	19	±20	3.8/4.2	5.2/6	-	24	2200	7	-55 ~ +175
MFT3N20TS8S	30	20	12.6	±20	5/6	6.5/9	-	11.1	1160	5.4	-55 ~ +150
MFT3N15TS8S	30	15	9.5	±20	8.5/10	12.5/15	-	7.5	750	4	-55 ~ +150
MFT3N10TS8S	30	10	6.3	±20	9.5/12	13/18	-	7.4	620	2.1	-55 ~ +150
MFT3N9TS8S	30	9	5.7	±20	16/18	23/28	-	4.1	345	2.5	-55 ~ +150
MFT4N12TS81S	40	12	-	±20	4.8/5.8	6/7.8	-	25	25	1.47	-55 ~ +150
MFT4N15TS8S	40	15	9.5	±20	7.7/9.5	11/13.5	-	12.2	1220	5.4	-55 ~ +150
MFT4N13TS8S	40	13	10	±20	10/12	14/17	-	13	1088	2.1	-50 ~ +150
MFT4N6A7TS8S	40	6.7	-	±20	16/19	20/25	11.8	-	722	1.47	-55 ~ +150
MFT6N30TS8S	60	30	19	±20	4.9/5.8	5.4/7	-	32.8	4740	10.4	-55 ~ +150
MFT6N14TS8S	60	14	56	±20	7.5/8.8	-	26.9	-	1690	2	-50 ~ +150
MFT6N10TS8S	60	10	6.3	±20	10/12	12/15	39.2	-	2100	2.5	-55 ~ +150
MFT6N6A5TS8S	60	6.5	4.1	±20	13/17	16/20	-	13.2	1515	1.5	-55 ~ +150
MFT6N6TS8S	60	6	3.6	±20	17/21	20/24	28	-	1680	1.47	-50 ~ +150
MFT6N5A5TS8S	60	5.5	3.5	±20	43/50	50/60	14	-	800	1.66	-50 ~ +150
MFT6V5N16A7TS8S	65	16.7	-	±20	12/14	15/18.5	39.2	-	2100	2.5	-55 ~ +150
MFT6V5N33TS8S	65	33	20.8	20/-12	3.7/4.5	5.7/7.5	54	-	2976	9.4	-50 ~ +150
MFT8N19TS8S	80	19	12	±25	10.5/13	-	31.2	-	1810	10.2	-50 ~ +150
MFT10N19TS8S	100	19	12	20/-12	7.2/8.5	9.8/12.4	53.5	-	2900	10.4	-50 ~ +150
MFT10N12TS8S	100	12	7.6	20/-12	7.6/9.2	10.8/14	39.7	-	2550	5	-50 ~ +150
MFT10N15TS8S	100	15	9.5	±20	15/18	18/24	66.7	-	4812	9.6	-50 ~ +150
MFT10N10TS8S	100	10	6.3	±20	15/18	17/22	36.8	-	1820	10.4	-50 ~ +150
MFT15N4TS8S	150	4	2.5	±20	52/65	60/80	30	-	1790	2.5	-50 ~ +150

MOSFET TSOP8 Package

MFT-TS8 series

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ELECTRICAL CHARACTERISTICS CONTINUED

MFT(P)-TS8 Series – Single P Channel Type

Part Number	V _{DS} (V)	I _D (A)		V _{GS} (V)	R _{DS(ON)} (mΩ) max. at V _{GS}		Q _g (nC)		CISS (pF)	P _D (W) @25°C	T _s , T _J (°C)
		25°C	100°C		10V	4.5V	10V	4.5V			
MFT2P11TS8S	-20	11	7	±10	-	12/16	-	27	2320	2.5	-55 ~ +150
MFT2P14TS8S	-20	14	8.8	±12	-	6.5/8.5	-	44.4	4060	2	-55 ~ +150
MFT3P24TS8S	-30	24	-	±20	3.8/4.8	5.8/7.8	108	-	6220	2.1	-55 ~ +150
MFT3P13TS8S	-30	13	7.8	±20	8/9.5	12.4/15	-	35	3300	4.2	-55 ~ +150
MFT3P10TS8S	-30	10	6.3	±20	12.4/ 15.5	19.2/25	-	14.6	1730	2.5	-55 ~ +150
MFT3P8TS8S	-30	8	5.1	±20	16.5/20	25.6/32	-	11	1250	2.1	-55 ~ +150
MFT3P5A5TS8S	-30	5.5	3.48	±20	40/50	62/80	-	5.1	560	2.1	-55 ~ +150
MFT4P10TS8S	-40	10	6.3	±20	11.5/15	16/22	-	22.2	2757	4.2	-55 ~ +150
MFT4P6A5TS8S	-40	6.5	4.1	±20	37/45	57/72	-	8.2	825	3.3	-50 ~ +150
MFT6P8A5TS8S	-60	8.5	5.4	±20	23/30	28/40	43.8	-	2595	4.1	-55 ~ +150
MFT6P3A3TS8S	-60	3.3	-	±20	60/72	75/90	16.4	-	870	1.47	-55 ~ +150

MFT(2N)-TS8 Series – Dual N Channel Type

Part Number	V _{DS} (V)	I _D (A)		V _{GS} (V)	R _{DS(ON)} (mΩ) max. at V _{GS}		Q _g (nC)		CISS (pF)	P _D (W) @25°C	T _s , T _J (°C)
		25°C	100°C		10V	4.5V	10V	4.5V			
MFT32N9TS8S	30	9	-	±20	8.6/11	10.8/15	16.6	-	750	1.47	-55 ~ +150
MFT32N10TS8S	30	10	6.3	±20	10/13	14/18	-	7.4	620	2.1	-55 ~ +150
MFT32N7A5TS8S	30	7.5	4.8	±20	15/20	23/30	-	4.1	345	2.1	-55 ~ +150
MFT42N12TS8S	40	12	7.5	±20	11/13	14/18	-	12.2	1220	2.1	-50 ~ +150
MFT42N10TS8S	40	10	6.3	±20	12/15	15/20	-	13	1088	2.1	-50 ~ +150
MFT42N8TS8S	40	8	-	±20	16/18	20/25	10.8	-	724	2	-50 ~ +150
MFT62N20TS8S	60	20	13	±20	23/28	27/35	28	-	1680	2.1	-50 ~ +150
MFT62N10TS8S	60	10	6.3	±20	28/34	34/44	16.6	-	1180	2.1	-50 ~ +150
MFT62N4A5TS8S	60	4.5	2.85	±20	44/54	50/63	14	-	835	2.1	-50 ~ +150

MFT(2P)-TS8 Series – Dual P Channel Type

Part Number	V _{DS} (V)	I _D (A)		V _{GS} (V)	R _{DS(ON)} (mΩ) max. at V _{GS}		Q _g (nC)		CISS (pF)	P _D (W) @25°C	T _s , T _J (°C)
		25°C	100°C		10V	4.5V	10V	4.5V			
MFT32P10TS8S	-30	10	6.3	±20	12/16	18/26	-	14.6	1730	2.1	-55 ~ +150
MFT32P7TS8S	-30	7	4.43	±20	20/23	30/36	-	11	1250	2.1	-55 ~ +150

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ELECTRICAL CHARACTERISTICS CONTINUED

MFT(NP)-TS8 Series – Dual N+P Channel Type

Part Number	V _{DS} (V)	I _D (A)		V _{GS} (V)	R _{DS(ON)} (mΩ) max. at V _{GS}		Q _g (nC)		C _{ISS} (pF)	P _D (W) @25°C	T _s , T _J (°C)
		25°C	100°C		10V	4.5V	10V	4.5V			
MFT3NP10TS8S	30	10	6.3	±20	10/13	10/18	-	7.4	620	5	-55 ~ +150
	-30	6.5	4.1	±20	24/30	37/46	-	8	757	5	-55 ~ +150
MFT3NP8TS8S	30	8	5	±20	15/20	21/30	-	4.1	345	2.5	-55 ~ +150
	-30	5.5	3.5	±20	40/50	65/90	-	5.1	560	2.5	-55 ~ +150
MFT4NP6A7TS8S	40	6.7	4.3	±20	24/32	32/45	-	2.8	420	2.5	-55 ~ +150
	-40	7.2	4.5	±20	32/40	45/60	-	8	1050	2.5	-55 ~ +150
MFT6NP5A9TS8S	60	5.9	-	±20	25/30	28/36	16.6	-	1180	2.01	-55 ~ +150
	-60	4.7	-	±20	40/48	53/68	22.4	-	1250	2.01	-55 ~ +150
MFT6NP4A5TS8S	60	4.5	2.85	±20	45/54	52/63	14	-	800	3.57	-55 ~ +150
	-60	3.5	2.21	±20	87/105	120/145	10	-	785	3.57	-55 ~ +150
MFT10NP2A1TS8S	100	2.1	-	±20	128/155	132/170	14	-	1034	1.47	-55 ~ +150
	-100	1.7	-	±20	240/290	260/340	10.9	-	783	1.47	-55 ~ +150

Note:

1. TA=25°C unless otherwise specified. 2. PD is Power Dissipation Derate above 25°C.

*Specifications subject to change without notice.