MOSFET
TO251 Package

MFT-T251 series

MERITEK

FEATURE

- Operating and Storage Temperature: -55°C ~ +150°C
- Fast Switching Characteristics
- Improved dv/dt Capability

PART NUMBERING SYSTEM

MFT	60	N	3	T251S
(1)	(2)	(3)	(4)	(5)

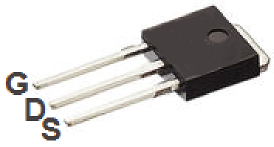
RoHS

No	Item	Code	Part Description	Series Reference
(1)	**Meritek Series**	**MFT**	Meritek MOSFET Series	Leaded Type
(2)	**Voltage Rating**	**60**	60: 600V	Drain-Source Voltage, 10:100V
(3)	**FET Type**	**N**	N: Single N Channel	P-Channel MOSFET
(4)	**Current Rating**	**3**	3: 3A	Continuous Drain Current, T_C=25°C
(5)	**Internal Code**	**T251S**	Internal Control Reference	Package or Project Reference

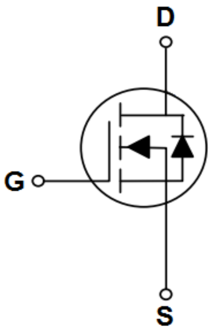
SURFACE MOUNT MOSFET PACKAGE REFERENCE TABLE

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)-T251	N	Single	1 ~ 95A	11.6 ~ 195mΩ	25 ~ 130W	40V, 60V, 65V, 80V, 100V, 500V, 600V, 650V,
MFT(P)-T251	P	Single	13 ~ 16A	65 ~ 85mΩ	20 ~ 25W	-60V

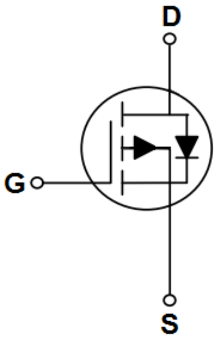
PIN CONFIGURATION



TO-251



Single N Type



Single P Type

ELECTRICAL CHARACTERISTICS

MFT(N)-T251 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)		CISS (pF)	P_D(W) @25°C	T_S, T_J (°C)
		25°C	100°C		10V	4.5V	10V	4.5V			
MFT4N50T251S	40	50	31.6	±20	6.5/8.5	9/12	-	12.2	1220	54	-55 ~ +150
MFT6N25T251S	60	25	16	±20	28/34	33/40	16.6	-	1180	40	-50 ~ +150
MFT6N11T251S	60	11	7	±20	60/75	70/90	9.3	-	500	25	-50 ~ +150
MFT8N12T251S	80	12	7.6	±20	77/100	80/115	19.2	-	1070	35	-50 ~ +150
MFT10N70T251S	100	70	44.3	20/-12	6.5/7.8	9/11.6	53.5	-	2900	104	-50 ~ +150
MFT10N15T2511S	100	15	9.5	±20	65/85	-	10.5	-	615	40	-50 ~ +150
MFT10N15T2512S	100	15	9.5	±20	72/90	75/100	9.3	-	1480	50	-50 ~ +150
MFT10N8T251S	100	8	4.8	±20	160/185	170/195	13.4	-	820	32	-50 ~ +150
MFT50N7T251S	500	7	4.4	±30	700/850	-	27	-	1420	60	-55 ~ +150
MFT50N5T251S	500	5	3.2	±30	1400/ 1800	-	16.2	-	740	52	-55 ~ +150
MFT50N4T251S	500	4	2.5	±30	2600/ 3200	-	10	-	435	42	-55 ~ +150
MFT50N3T251S	500	3	1.9	±30	4800/ 6000	-	6.8	-	265	34	-55 ~ +150
MFT50N2T251S	500	2	1.3	±30	6500/ 8000	-	5.4	-	180	30	-55 ~ +150
MFT50N1T251S	500	1	0.6	±30	13000/ 16000	-	4.5	-	110	25	-55 ~ +150
MFT60N4T251S	600	4	2.5	±30	1850/ 2200	-	16.5	-	760	50	-55 ~ +150
MFT60N2T2511S	600	2	1.3	±30	3900/ 4400	-	9.4	-	280	52	-50 ~ +150
MFT60N2T2512S	600	2	1.3	±30	3900/ 4400	-	9.4	-	280	52	-50 ~ +150
MFT60N3T251S	600	3	1.9	±30	3800/ 4500	-	9.9	-	425	42	-55 ~ +150
MFT60N1T251S	600	1	0.6	±30	8500/ 10500	-	5.9	-	185	30	-55 ~ +150
MFT65N7T2511S	650	7	4.4	±30	1000/ 1200	-	32	-	1100	77	-55 ~ +150
MFT65N7T2512S	650	7	4.4	±30	1200/ 1600	-	26.5	-	1400	59	-55 ~ +150
MFT65N4T2511S	650	4	2.5	±30	2200/ 2600	-	15.4	-	518	42	-55 ~ +150
MFT65N4T2512S	650	4	2.5	±30	2200/ 2600	-	16	-	750	50	-55 ~ +150
MFT65N3T251S	650	3	1.9	±30	4000/ 5200	-	10.2	-	430	39	-55 ~ +150
MFT65N2T251S	650	2	1.3	±30	7500/ 9000	-	7.5	-	230	32	-55 ~ +150
MFT65N1T251S	650	1	0.6	±30	95000/ 12000	-	6	-	180	29	-55 ~ +150

ELECTRICAL CHARACTERISTICS CONTINUED

MFT(P)-T251 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			
MFT6P16T251S	-60	16	10	±20	39/48	53/65	22.4	-	1250	25	-50 ~ +150
MFT6P13T251S	-60	13	8	±25	54/68	72/85	16.4	-	870	20	-50 ~ +150

Note:

1. TA=25ºC unless otherwise specified. 2. PD is Power Dissipation Derate above 25℃.

*Specifications subject to change without notice.