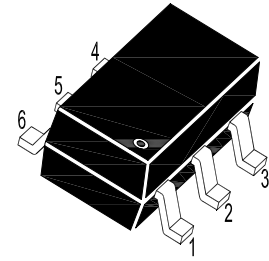
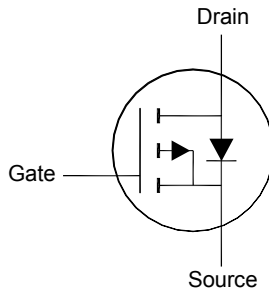


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P-Channel Enhancement Mode MOSFET



1. Drain 2. Drain 3. Gate
4. Source 5. Drain 6. Drain
SOT-26 Plastic Package

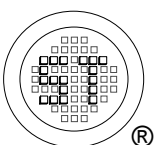
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Drain-Source Voltage	$-V_{DSS}$	30	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current	$-I_D$	$T_A = 25^\circ\text{C}$	5
		$T_A = 70^\circ\text{C}$	4.2
Peak Drain Current ¹⁾	$-I_{DM}$	20	A
Maximum Continuous Source Current	$-I_S$	2.8	A
Total Power Dissipation	P_{tot}	$T_A = 25^\circ\text{C}$	2
		$T_A = 70^\circ\text{C}$	1.4
Operating Junction Temperature	T_j	- 55 to + 150	$^\circ\text{C}$
Storage Temperature	T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ Repetitive Rating: Pulse width limited by maximum junction temperature.

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	110	$^\circ\text{C/W}$



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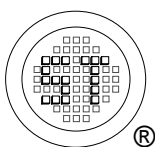


Dated: 10/04/2013 Rev: 01

MMFTP6405D

Characteristics at $T_a = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage at $-I_D = 250 \mu\text{A}, V_{GS} = 0 \text{ V}$	$-V_{(BR)DSS}$	30	-	-	V
Drain-Source Leakage Current at $-V_{DS} = 24 \text{ V}$	$-I_{DSS}$	-	-	1	μA
On State Drain Current at $-V_{DS} = 5 \text{ V}, -V_{GS} = 4.5 \text{ V}$	$-I_{D(ON)}$	20			A
Gate Leakage Current at $V_{GS} = \pm 20 \text{ V}$	I_{GSS}	-	-	± 100	nA
Gate-Source Threshold Voltage at $V_{DS} = V_{GS}, -I_D = 250 \mu\text{A}$	$-V_{GS(th)}$	1	-	3	V
Drain-Source On-State Resistance at $-V_{GS} = 10 \text{ V}, -I_D = 5 \text{ A}$ at $-V_{GS} = 4.5 \text{ V}, -I_D = 4 \text{ A}$	$R_{DS(on)}$	-	-	52 87	m Ω
Drain-Source Diode Forward Voltage at $-I_S = 1 \text{ A}, V_{GS} = 0 \text{ V}$	V_{SD}	-	-	1	V
Forward Transconductance at $-V_{DS} = 5 \text{ V}, -I_D = 5 \text{ A}$	g_{FS}	6	-	-	S
Input Capacitance at $-V_{DS} = 15 \text{ V}, -V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$	C_{iss}	-	-	840	pF
Output Capacitance at $-V_{DS} = 15 \text{ V}, -V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$	C_{oss}	-	120	-	pF
Reverse Transfer Capacitance at $-V_{DS} = 15 \text{ V}, -V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$	C_{rss}	-	75	-	pF
Turn-On Delay Time at $-V_{GS} = 10 \text{ V}, -V_{DS} = 15 \text{ V}, R_{GEN} = 3 \Omega, R_L = 3 \Omega$	$t_{d(on)}$	-	8.3	-	ns
Turn-Off Delay Time at $-V_{GS} = 10 \text{ V}, -V_{DS} = 15 \text{ V}, R_{GEN} = 3 \Omega, R_L = 3 \Omega$	$t_{d(off)}$	-	29	-	ns
Turn-On Rise Time at $-V_{GS} = 10 \text{ V}, -V_{DS} = 15 \text{ V}, R_{GEN} = 3 \Omega, R_L = 3 \Omega$	t_r	-	5	-	ns
Turn-Off Fall Time at $-V_{GS} = 10 \text{ V}, -V_{DS} = 15 \text{ V}, R_{GEN} = 3 \Omega, R_L = 3 \Omega$	t_f	-	14	-	ns



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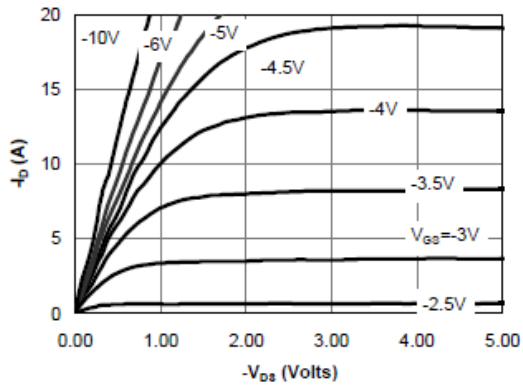


Figure 1: On-Region Characteristics

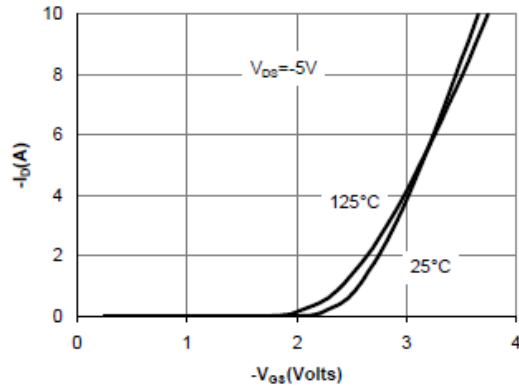


Figure 2: Transfer Characteristics

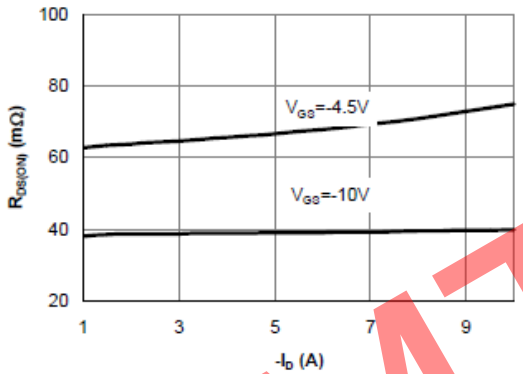


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

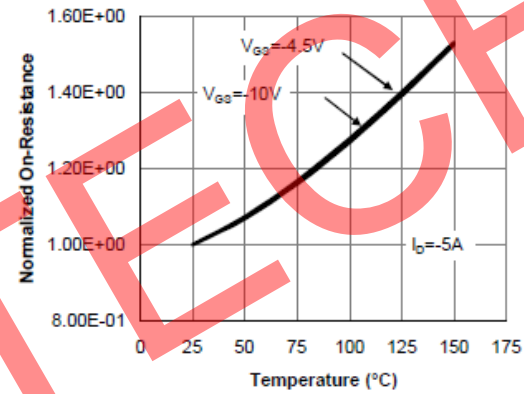


Figure 4: On-Resistance vs. Junction Temperature

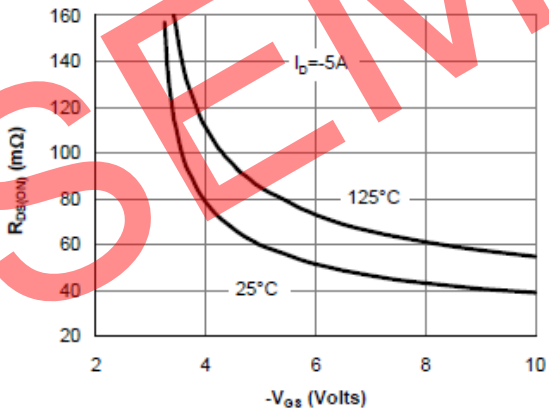


Figure 5: On-Resistance vs. Gate-Source Voltage

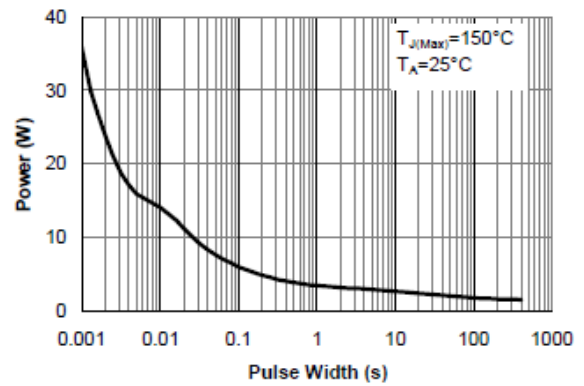
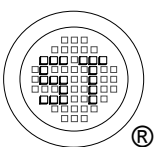


Figure 6: Single Pulse Power Rating Junction-to-Ambient (Note E)



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