

MOS FIELD EFFECT TRANSISTOR $\mu PA607T$

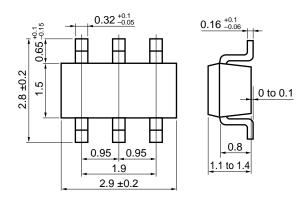
P-CHANNEL MOS FET (6-PIN 2 CIRCUITS) FOR SWITCHING

The $\mu PA607T$ is a mini-mold device provided with two MOS FET elements. It achieves high-density mounting and saves mounting costs.

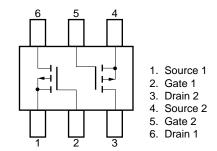
FEATURES

- Two MOS FET elements in package the same size as SC-59
- Complement to μPA606T
- · Automatic mounting supported

PACKAGE DIMENSIONS (in millimeters)



PIN CONNECTION



ABSOLUTE MAXIMUM RATINGS (TA = 25 °C)

PARAMETER	SYMBOL	RATINGS	UNIT	
Drain to Source Voltage	VDSS	-50	V	
Gate to Source Voltage	Vgss	∓16	V	
Drain Current (DC)	I _{D(DC)}	-100	mA	
Drain Current (pulse)	I _{D(pulse)} *	-200	mA	
Total Power Dissipation	Рт	300 (Total)	mW	
Channel Temperature	Tch	150	°C	
Storage Temperature	T _{stg}	-55 to +150	°C	

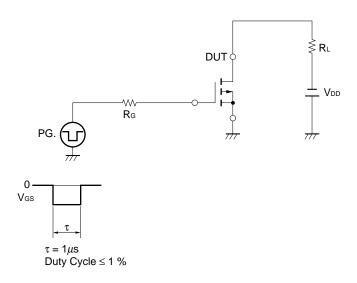
^{*} PW \leq 10 ms, Duty Cycle \leq 50 %

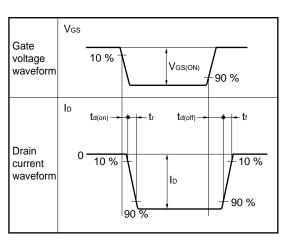


ELECTRICAL CHARACTERISTICS (TA = 25 °C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Drain Cut-off Current	Ipss	V _{DS} = -50 V, V _{GS} = 0	-	-	-1.0	μΑ
Gate Leakage Current	Igss	Vgs = ∓16 V, Vps = 0	-	-	∓1.0	μΑ
Gate Cut-off Voltage	V _{GS(off)}	$V_{DS} = -5.0 \text{ V}, I_{D} = -1.0 \mu A$	-1.5	-1.9	-2.5	V
Forward Transfer Admittance	y _{fs}	$V_{DS} = -5.0 \text{ V}, I_{D} = -10 \text{ mA}$	15	-	-	mS
Drain to Source On-State Resistance	RDS(on)1	$V_{GS} = -4.0 \text{ V}, \text{ ID} = -10 \text{ mA}$	-	60	100	Ω
Drain to Source On-State Resistance	RDS(on)2	$V_{GS} = -10 \text{ V}, I_{D} = -10 \text{ mA}$	-	40	60	Ω
Input Capacitance	Ciss	$V_{DS} = -5.0 \text{ V}, V_{GS} = 0, f = 1.0 \text{ MHz}$	-	15	-	pF
Output Capacitance	Coss		-	10	-	pF
Reverse Transfer Capacitance	Crss		-	1	-	pF
Turn-On Delay Time	td(on)	$V_{\text{GS(on)}} = -5.0 \text{ V, Rg} = 10 \ \Omega, \\ V_{\text{DD}} = -5.0 \text{ V, Id} = -10 \text{ mA, RL} = 500 \ \Omega$	-	45	-	ns
Rise Time	tr		-	75	-	ns
Turn-Off Delay Time	t _{d(off)}		-	25	-	ns
Fall Time	t f		-	80	-	ns

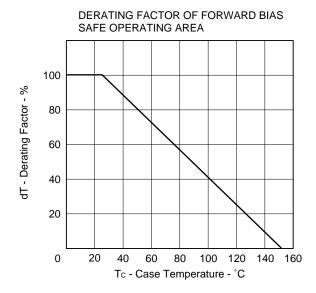
SWITCHING TIME MEASUREMENT CIRCUIT AND CONDITIONS

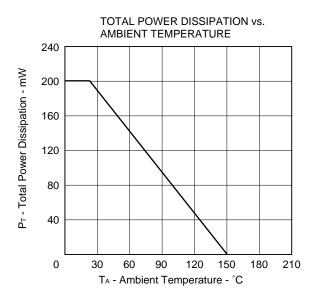


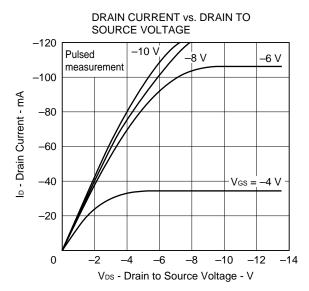


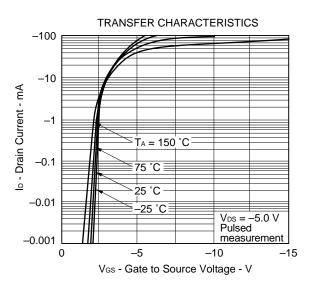


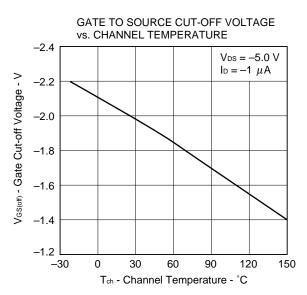
TYPICAL CHARACTERISTICS (TA = 25 °C)

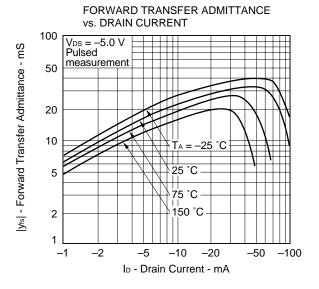




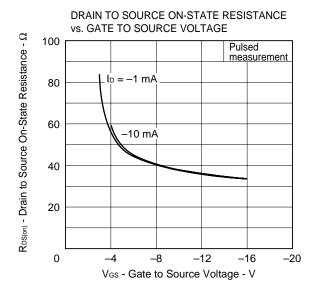


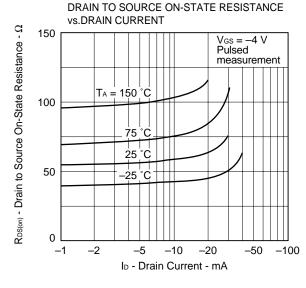


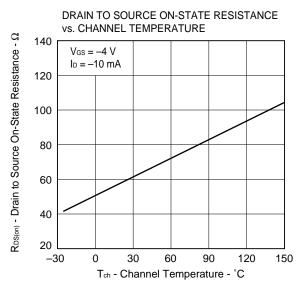


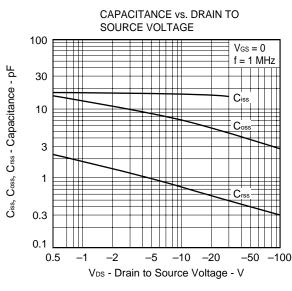


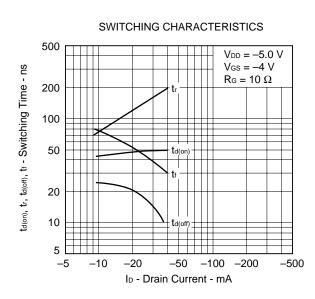


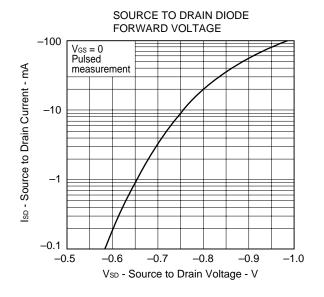














REFERENCE

Document Name	Document No.	
NEC semiconductor device reliability/quality control system	TEI-1202	
Quality grade on NEC semiconductor devices	IEI-1209	
Semiconductor device mounting technology manual	C10535E	
Guide to quality assurance for semiconductor devices	MEI-1202	
Semiconductor selection guide	X10679E	

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Anti-radioactive design is not implemented in this product.