MOS FIELD EFFECT TRANSISTOR μ**ΡΑ603T**

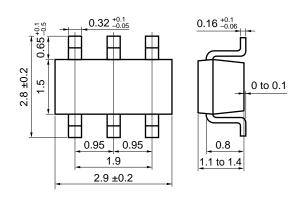
P-CHANNEL MOS FET (6-PIN 2 CIRCUITS)

The μ PA603T is a mini-mold device provided with two MOS FET circuits. It achieves high-density mounting and saves mounting costs.

FEATURES

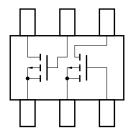
NEC

- · Two MOS FET circuits in package the same size as SC-59
- Complement to μPA602T
- Automatic mounting supported •



PACKAGE DIMENSIONS (in millimeters)

PIN CONNECTION (Top view)



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)	D(DC)	-100	mA					
Drain Current (pulse)	D(pulse)*	-200	mA					
Total Power Dissipation	Рт	300 (Total)	mW					
Channel Temperature	Tch	150	°C					

Tstg

-55 to +150

°C

* PW \leq 10 ms, Dury Cycle \leq 50 %

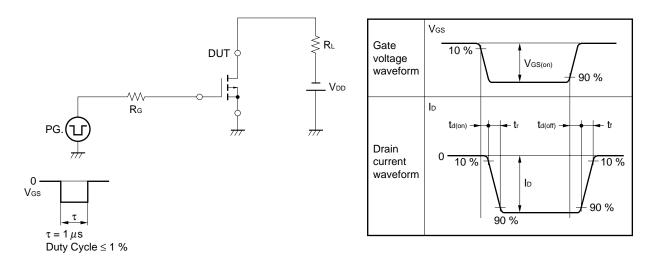
Storage Temperature

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Drain Cut-off Current	loss	$V_{DS} = -50 V, V_{GS} = 0$	-	-	-1.0	μA
Gate Leakage Current	lgss	V _{GS} = ∓16 V, V _{DS} = 0	-	-	∓ 1.0	μA
Gate Cut-off Voltage	VGS(off)	$V_{DS} = -5.0 \text{ V}, \text{ Id} = -1.0 \ \mu\text{A}$	-1.5	-1.9	-2.5	V
Forward Transfer Admittance	y _{fs}	$V_{DS} = -5.0 \text{ V}, \text{ Id} = -10 \text{ mA}$	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	$V_{GS} = -10 \text{ V}, \text{ ID} = -10 \text{ mA}$	-	40	60	Ω
Input Capacitance	Ciss	$V_{DS} = -5.0 \text{ V}, \text{ V}_{GS} = 0, \text{ f} = 1.0 \text{ MHz}$	_	17	-	pF
Output Capacitance	Coss		_	9	-	pF
Reverse Transfer Capacitance	Crss		_	1	-	pF
Turn-On Delay Time	td(on)	$V_{GS(on)} = -4.0 \text{ V}, \text{ R}_{G} = 10 \Omega,$	_	45	-	ns
Rise Time	tr	$V_{DD} = -5.0 \text{ V}, \text{ Id} = -10 \text{ mA}, \text{ R}_{L} = 500 \Omega$	-	75	-	ns
Turn-Off Delay Time	td(off)		-	25	-	ns
Fall Time	tr		-	80	-	ns

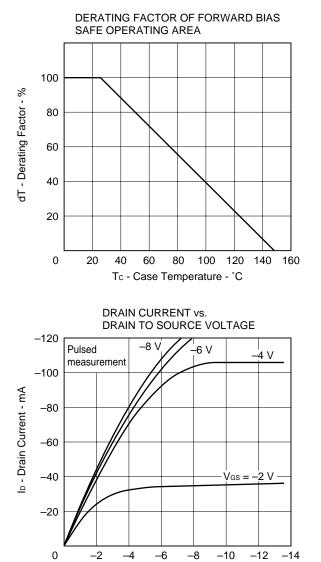
ELECTRICAL CHARACTERISTICS (TA = 25 °C)

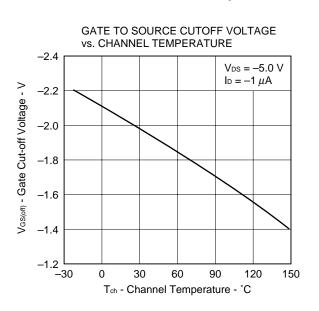
Marking: JA

SWITCHING TIME MEASUREMENT CIRCUIT AND CONDITIONS

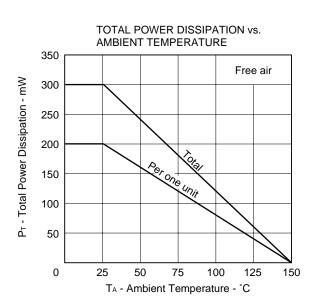




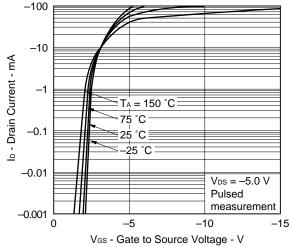




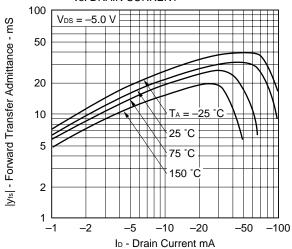
VDS - Drain to Source Voltage - V

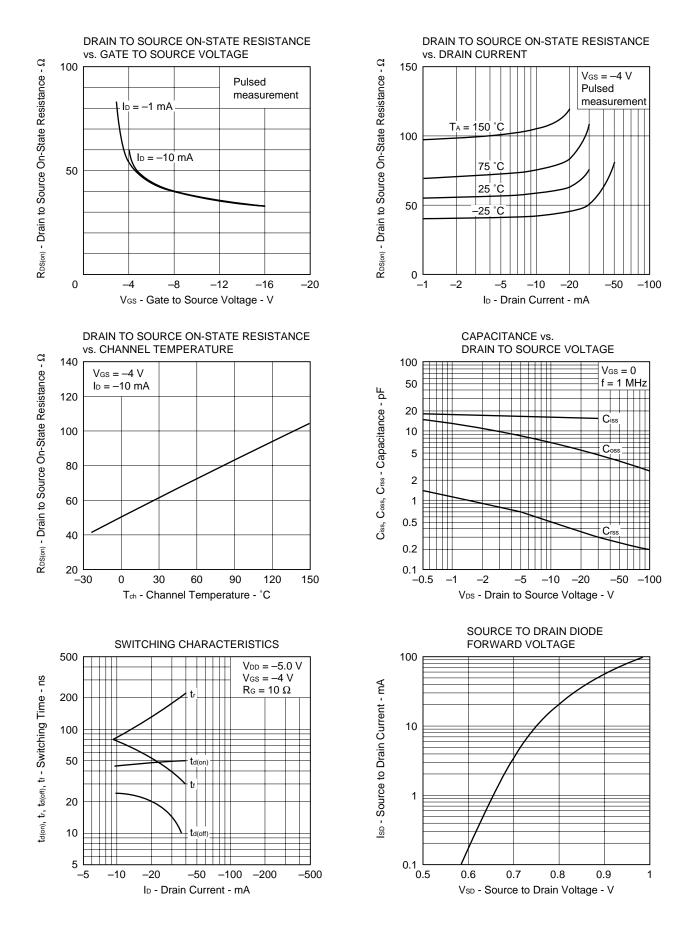






FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT





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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Special: Transportation equipment (automobiles, trains, ships, etc.), traffic control systems, anti-disaster systems, anti-crime systems, safety equipment and medical equipment (not specifically designed for life support)

Specific: Aircrafts, aerospace equipment, submersible repeaters, nuclear reactor control systems, life support systems or medical equipment for life support, etc.

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Anti-radioactive design is not implemented in this product.

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