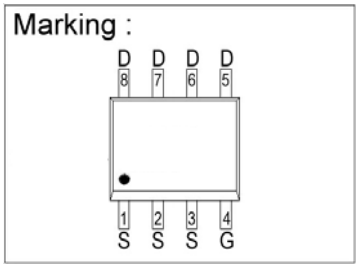
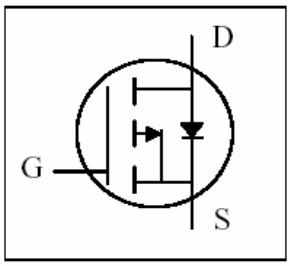
-30V P-Channel Enhancement Mode MOSFET

VDS= -30V
RDS(ON), Vgs@-10V, Ids@-5.3A = 60mΩ
RDS(ON), Vgs@-4.5V, Ids@-4.2A = 95mΩ





SOP-8

Features

Advanced trench process technology
High Density Cell Design For Ultra Low On-Resistance
Improved Shoot-Through FOM
Package Dimensions

Order Information

Product	Package	Marking	Packing
PT9435	SOP-8	PT9435	3000PCS/Reel

Maximum Ratings and Thermal Characteristics (TA = 25oC unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-Source Voltage		V_{DS}	-30	V
Gate-Source Voltage		V_{GS}	± 20	
Continuous Drain Current		I_D	-5.3	A
Pulsed Drain Current [1]		I_{DM}	-20	
Maximum Power Dissipation	TA = 25°C	P_D	2.5	W
	TA = 75°C		1.2	
Operating Junction and Storage Temperature Range		T_J, T_{stg}	-55 to 150	°C
Junction-to-Case Thermal Resistance		$R_{\theta JC}$	24	°C/W
Junction-to-Ambient Thermal Resistance (PCB mounted) [2]		$R_{\theta JA}$	62.5	

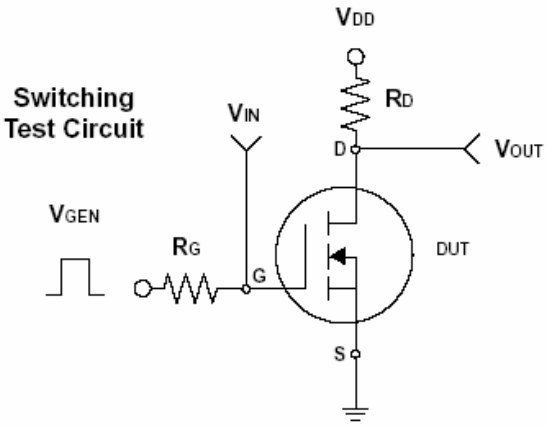
Notes
1) Pulse width limited by maximum junction temperature.
2) Surface Mounted on FR4 Board, t ≤ 5 sec.

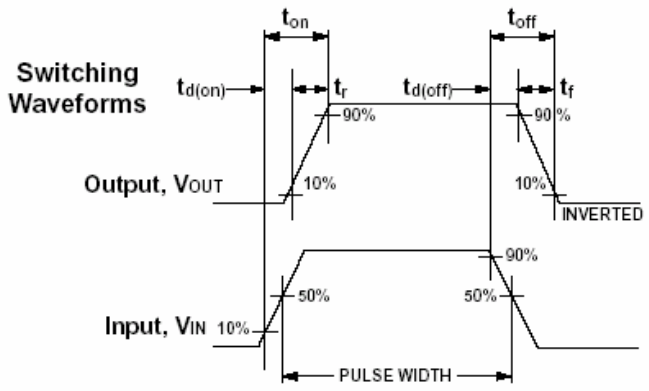
-30V P-Channel Enhancement Mode MOSFET

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Static						
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS} = 0V, I_D = -250uA	-30			V
Drain-Source On-State Resistance	$R_{DS(on)}$	V_{GS} = -4.5V, I_D = -4.2A		70.0	95.0	mΩ
Drain-Source On-State Resistance	$R_{DS(on)}$	V_{GS} = -10V, I_D = -5.3A		50.0	60.0	
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D = -250uA	-1		-3	V
Zero Gate Voltage Drain Current 0	I_{DSS}	V_{DS} = -24V, V_{GS} = 0V			1	uA
Gate Body Leakage	I_{GSS}	V_{GS} = ± 16V, V_{DS} = 0V			±100	nA
Forward Transconductance	g_{fs}	V_{DS} = -10V, I_D = -5.3A		10	__	S
Dynamic[1)]						
Total Gate Charge	Q_g	V_{DS} =-15V, I_D = -5.3A V_{GS} = -10V		9.35		nC
Gate-Source Charge	Q_{gs}			3.43		
Gate-Drain Charge	Q_{gd}			1.7		
Turn-On Delay Time	$t_{d(on)}$	V_{DD} = -15V, R_L = 15Ω I_D = -1A, V_{GEN} = -10V R_G = 6Ω		10.8		ns
Turn-On Rise Time	t_r			2.33		
Turn-Off Delay Time	$t_{d(off)}$			22.53		
Turn-Off Fall Time	t_f			3.87		
Input Capacitance	C_{iss}	V_{DS} = -15V, V_{GS} = 0V f = 1.0 MHz		551.57		pF
Output Capacitance	C_{oss}			90.96		
Reverse Transfer Capacitance	C_{rss}			60.79		
Source-Drain Diode						
Max. Diode Forward Current	I_S				-2.6	A
Diode Forward Voltage	V_{SD}	I_S = -2.6A, V_{GS} = 0V			-1.3	V

[1)] Pulse test: pulse width <= 300us, duty cycle<= 2%

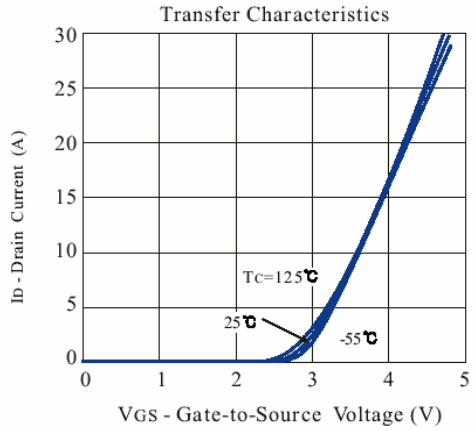


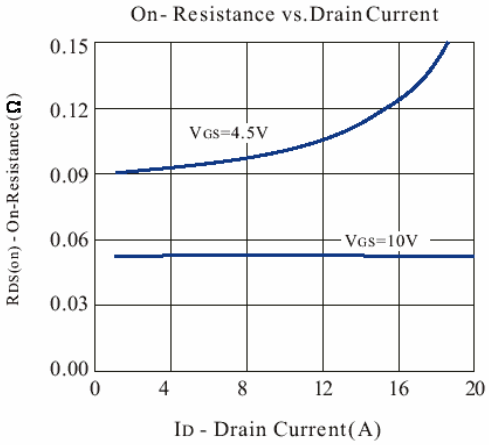


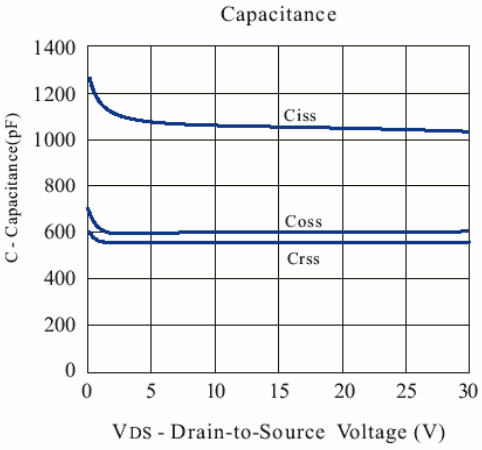
-30V P-Channel Enhancement Mode MOSFET

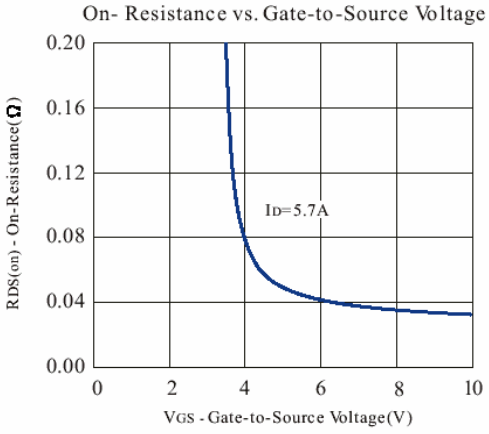
Characteristics Curve

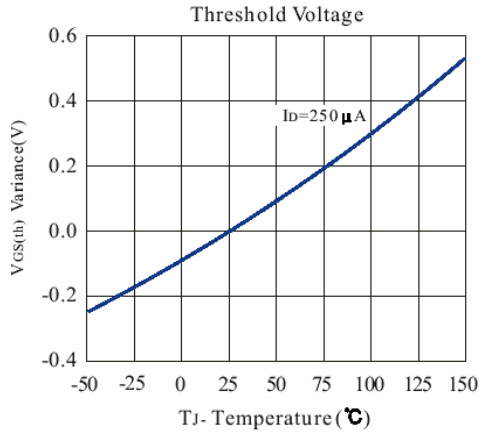
Typical Characteristics (T_J =25℃ Noted)



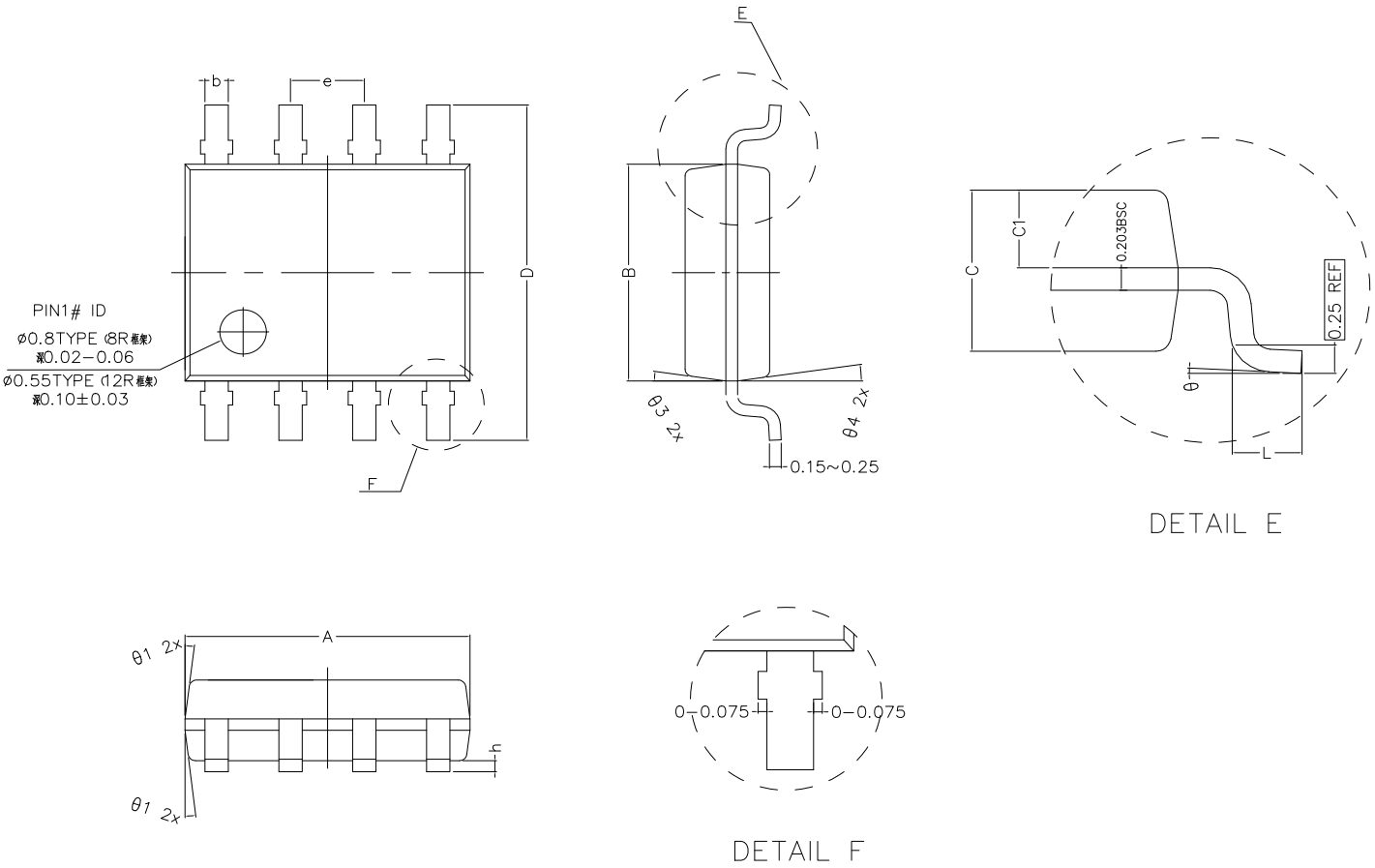








SOP-8 **Package Outline Dimensions (Units: mm)**



COMMON DIMENSIONS (UNITS OF MEASURE IS mm)			
	MIN	NORMAL	MAX
A	4.800	4.900	5.000
B	3.800	3.900	4.000
C	1.350	1.450	1.550
C1	0.650	0.700	0.750
D	5.900	6.100	6.300
L	0.500	0.600	0.700
b	0.350	0.400	0.450
h	0.050	0.150	0.250
e	1.270TYPE		
θ_1	7° TYPE(8R)	12° TYPE(12R)	
θ_2	7° TYPE(8R)	10° TYPE(12R)	
θ_3	8° TYPE(8R)	12° TYPE(12R)	
θ_4	8° TYPE(8R)	10° TYPE(12R)	
θ	0° ~ 8°		