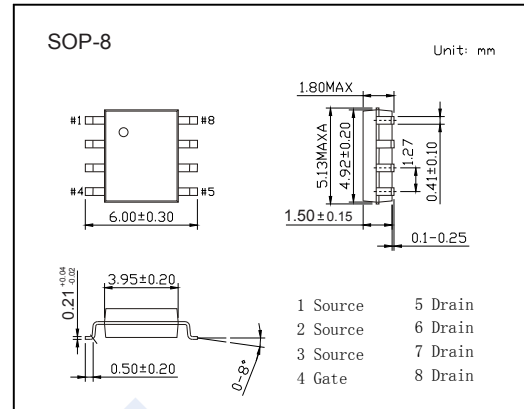
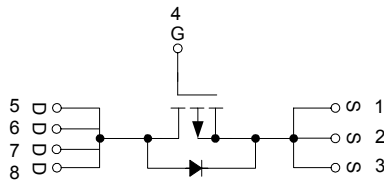


P-Channel MOSFET

APM9435K (APM9435KC)

■ Features

- $V_{DS} (V) \approx -30V$
- $I_D \approx -4.6 A$ ($V_{GS} \approx -10V$)
- $R_{DS(ON)} < 52m\Omega$ ($V_{GS} \approx -10V$)
- $R_{DS(ON)} < 80m\Omega$ ($V_{GS} \approx -4.5V$)



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 25	
Continuous Drain Current @ $V_{GS} = -10V$ (Note.1)	I_D	-4.6	A
Pulsed Drain Current @ $V_{GS} = -10V$ (Note.1)	I_{DM}	-20	
Power Dissipation $T_a = 25^\circ C$ $T_a = 100^\circ C$	P_D	2	W
		0.8	
Thermal Resistance, Junction- to-Ambient	R_{thJA}	62.5	$^\circ C/W$
Junction Temperature	T_J	150	$^\circ C$
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: Surface Mounted on $1in^2$ pad area, $t \leq 10sec$.

P-Channel MOSFET

APM9435K (APM9435KC)

■ Electrical Characteristics Ta = 25℃

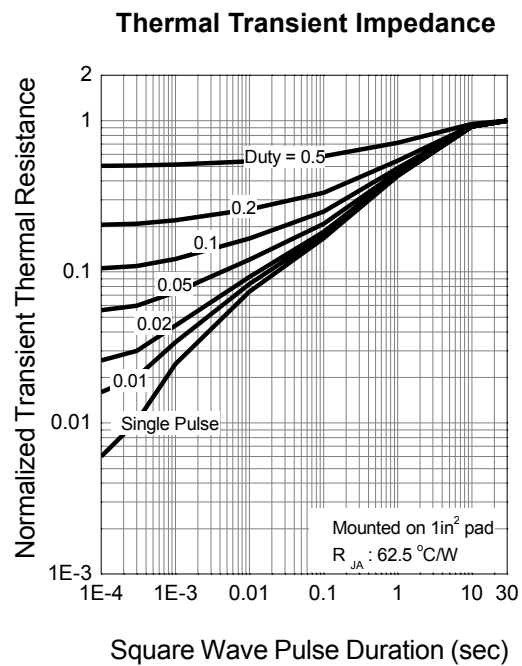
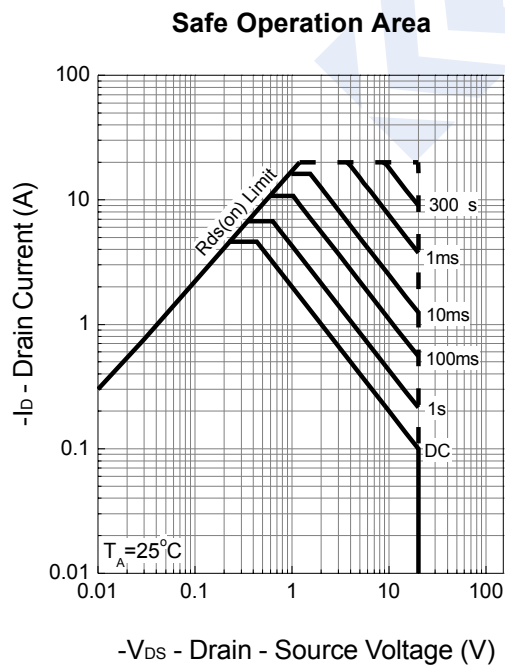
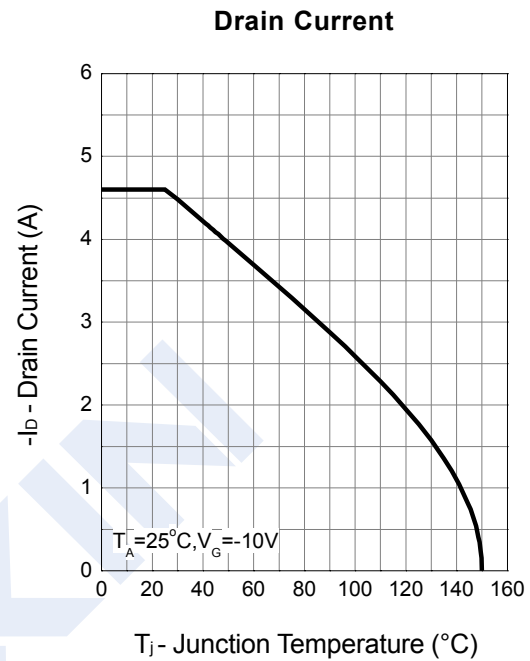
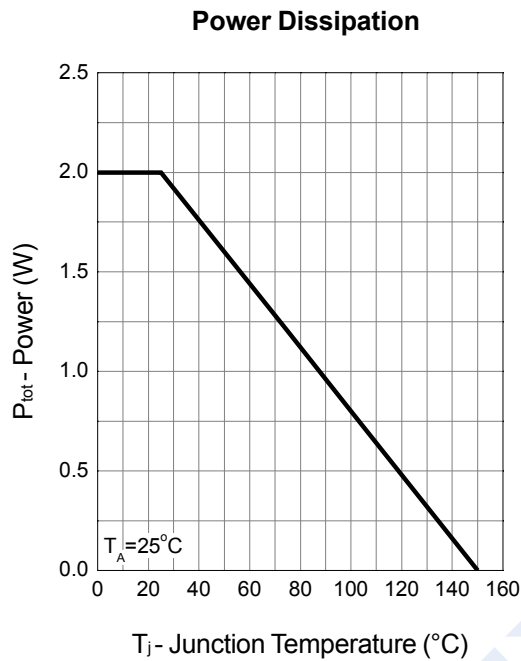
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =-250 μA, V _{GS} =0V	-30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-24V, V _{GS} =0V			-1	μA
		V _{DS} =-24V, V _{GS} =0V, T _J =55℃			-30	
Gate-Body leakage current	I _{GSS}	V _{DS} =0V, V _{GS} =±25V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =-250 μA	-1		-2	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-4.6A (Note.1)		52	60	mΩ
		V _{GS} =-4.5V, I _D =-2A (Note.1)		80	95	
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =-25V, f=1MHz		845		pF
Output Capacitance	C _{oss}			120		
Reverse Transfer Capacitance	C _{rss}			80		
Gate resistance	R _g	V _{GS} =0V, V _{DS} =0V, f=1MHz		11.7		Ω
Total Gate Charge	Q _g	V _{GS} =-10V, V _{DS} =-15V, I _D =-4.6A		22.5	29	nC
Gate Source Charge	Q _{gs}			4.5		
Gate Drain Charge	Q _{gd}			2		
Turn-On DelayTime	t _{d(on)}	V _{DD} =-15V, R _L =15Ω, I _{DS} =-1A, V _{GEN} =-10V, R _G =6Ω		8	17	ns
Turn-On Rise Time	t _r			8	18	
Turn-Off DelayTime	t _{d(off)}			35	60	
Turn-Off Fall Time	t _f			11	28	
Maximum Body-Diode Continuous Current	I _S				-2	A
Diode Forward Voltage	V _{SD}	I _S =-2A, V _{GS} =0V (Note.1)			-1.3	V

Note.1: Pulse test ; pulse width≤300μs, duty cycle≤2%.

P-Channel MOSFET

APM9435K (APM9435KC)

■ Typical Characteristics

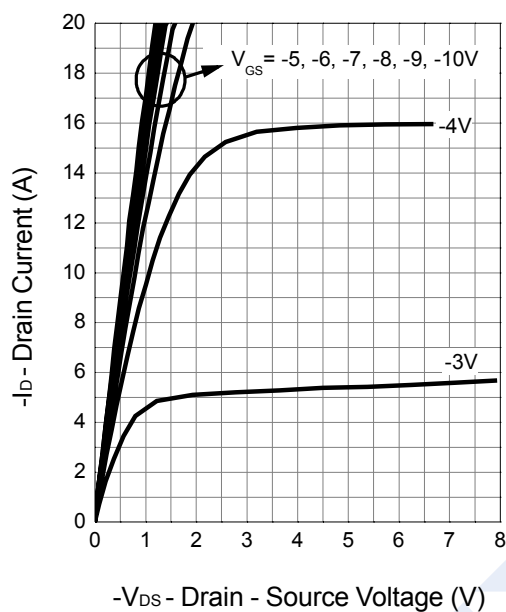


P-Channel MOSFET

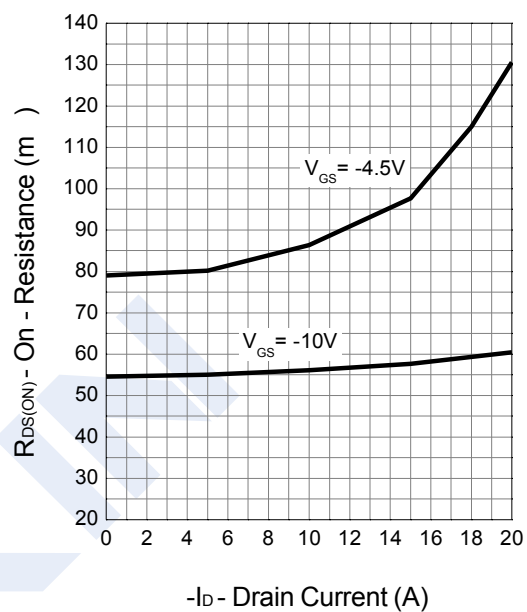
APM9435K (APM9435KC)

■ Typical Characteristics

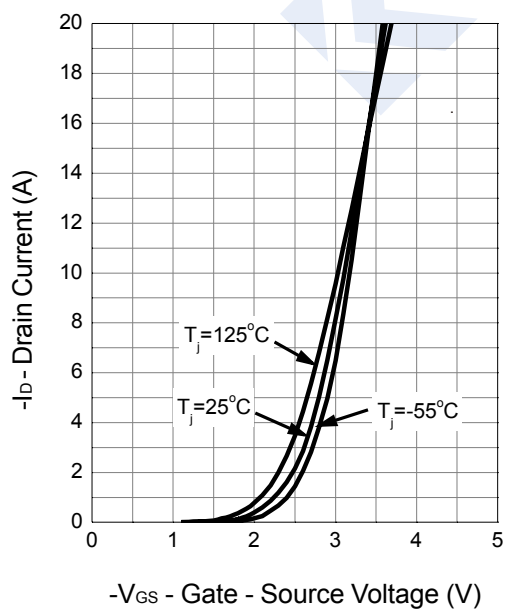
Output Characteristics



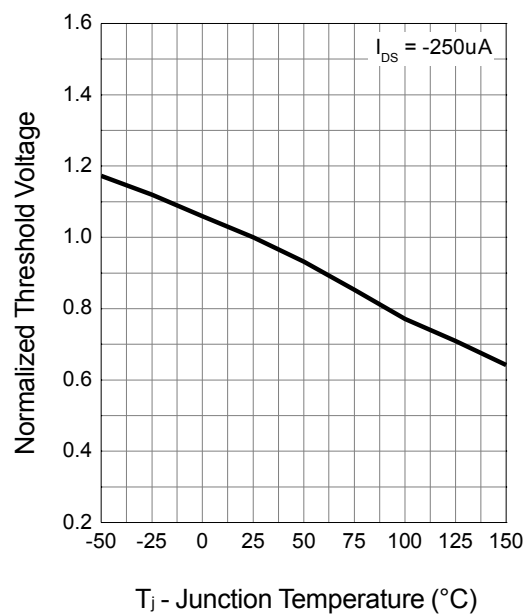
Drain-Source On Resistance



Transfer Characteristics



Gate Threshold Voltage

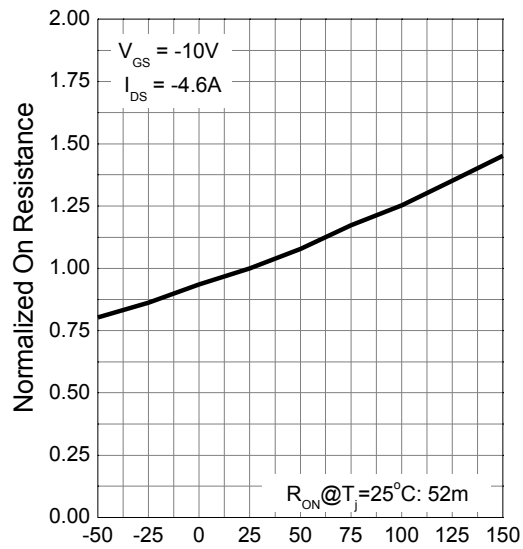


P-Channel MOSFET

APM9435K (APM9435KC)

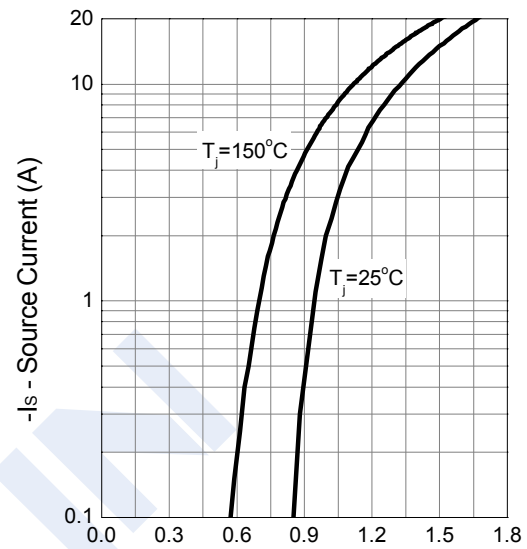
■ Typical Characteristics

Drain-Source On Resistance



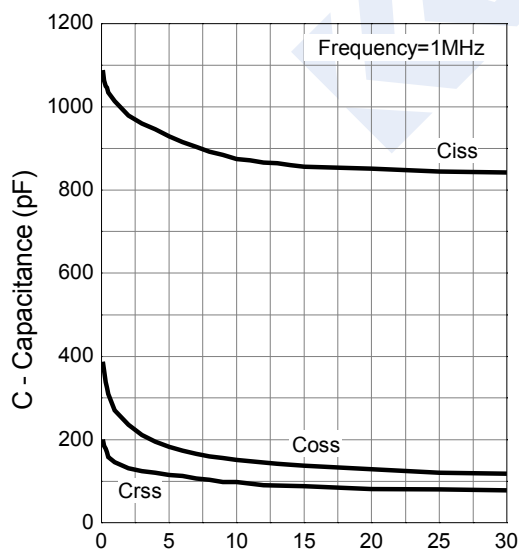
T_j - Junction Temperature ($^{\circ}\text{C}$)

Source-Drain Diode Forward



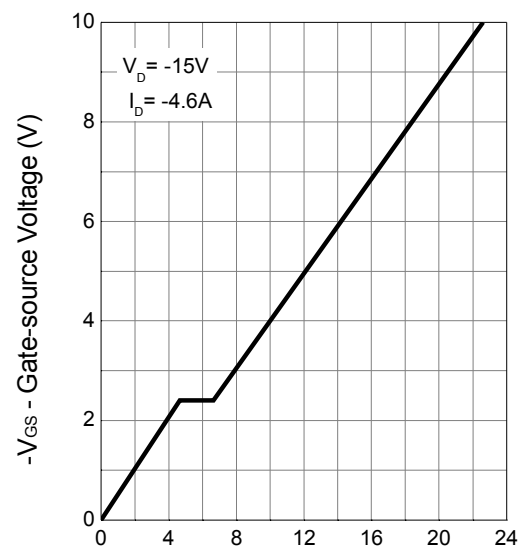
$-V_{SD}$ - Source - Drain Voltage (V)

Capacitance



$-V_{DS}$ - Drain - Source Voltage (V)

Gate Charge



Q_G - Gate Charge (nC)