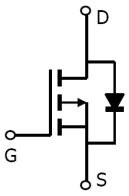
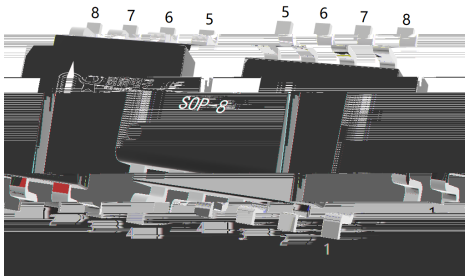
SOP-8 P MOS
P-Channel Enhancement Mode Field Effect Transistor in a SOP-8 Plastic Package.

V_{DS} (V) = -30V I_D = -6.9A (V_{GS} = ± 20V)
$R_{DS(ON)}$@-10V 30m (Typ.28.5m)
$R_{DS(ON)}$@-4.5V 55m (Typ.40m)
HF Product.

Power Management in Notebook computer, Portable Equipment and Battery powered systems.





PIN1 S PIN 2 S PIN 3 S PIN 4 G
PIN 5 D PIN 6 D PIN 7 D PIN 8 D

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-30	V
Gate-Source Voltage	V_{GSS}	±20	V
Continuous Drain Current	I_D (T_a=25°C)	-6.9	A
Continuous Drain Current	I_D (T_a=100°C)	-3.5	A
Pulsed Drain Current	I_{DM}	-28	A
Power Dissipation for Single Operation	P_D (T_a=25)	3.1	W
Maximum Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	R $_{JA}$	40	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250 A V_{GS}=0V	-30	-34		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30V V_{GS}=0V			-1.0	A
Gate-Body leakage current	I_{GSS}	V_{DS}=0V V_{GS}=±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS I_D=-250 A	-1.0	-1.5	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V I_D=-5A		28.5	30	m
		V_{GS}=-4.5V I_D=-3A		40	55	
Diode Forward Voltage	V_{SD}	I_S=-1A V_{GS}=0V			-1.2	V
Gate Resistance	R_g	V_{GS}=0V V_{DS}=0V f=1MHz		7		
Input Capacitance	C_{iss}	V_{GS}=0V V_{DS}=-15V f=1MHz		850		pF
Output Capacitance	C_{oss}			100		
Reverse Transfer Capacitance	C_{rss}			65		
Total Gate Charge	$Q_{g(10V)}$	V_{GS}=-10V V_{DS}=-15V I_D=-5A		14.2		nC
Total Gate Charge	$Q_{g(4.5V)}$			7.4		
Gate-Source Charge	Q_{gs}			3.3		
Gate-Drain Charge	Q_{gd}			3.8		
Turn-on Delay Time	$t_{d(ON)}$	V_{GS}=-10V V_{DS}=-15V R_L=1.8 R_{GEN}=3		8.3		ns
Turn-on Rise Time	t_r			6.5		
Turn-off Delay Time	$t_{d(OFF)}$			22		

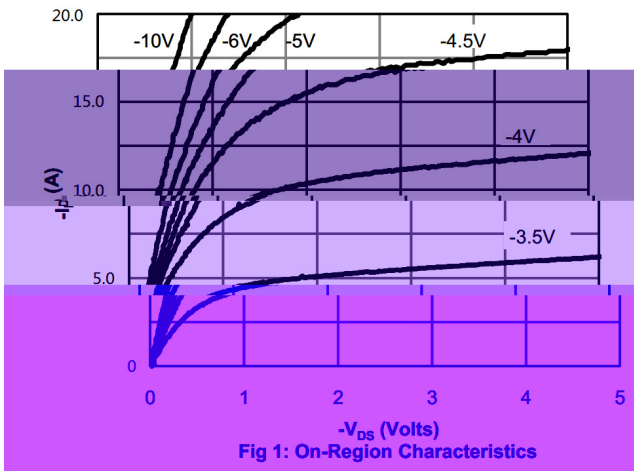


Fig 1: On-Region Characteristics

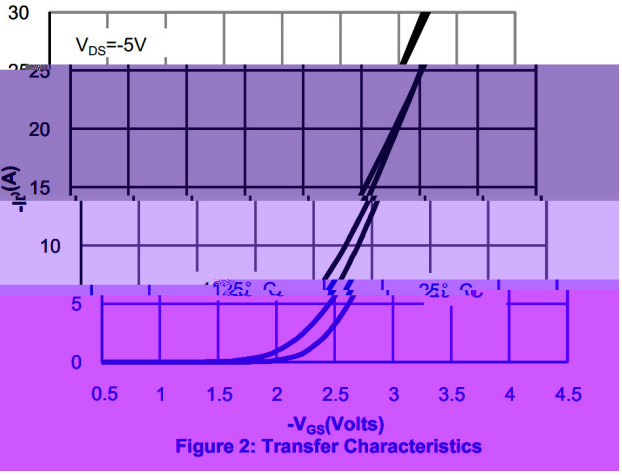
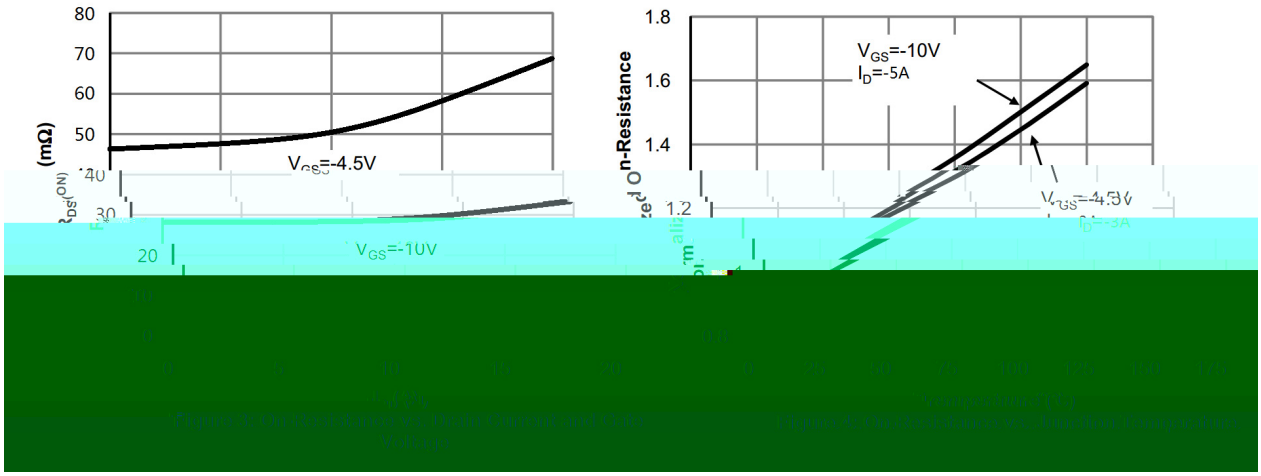
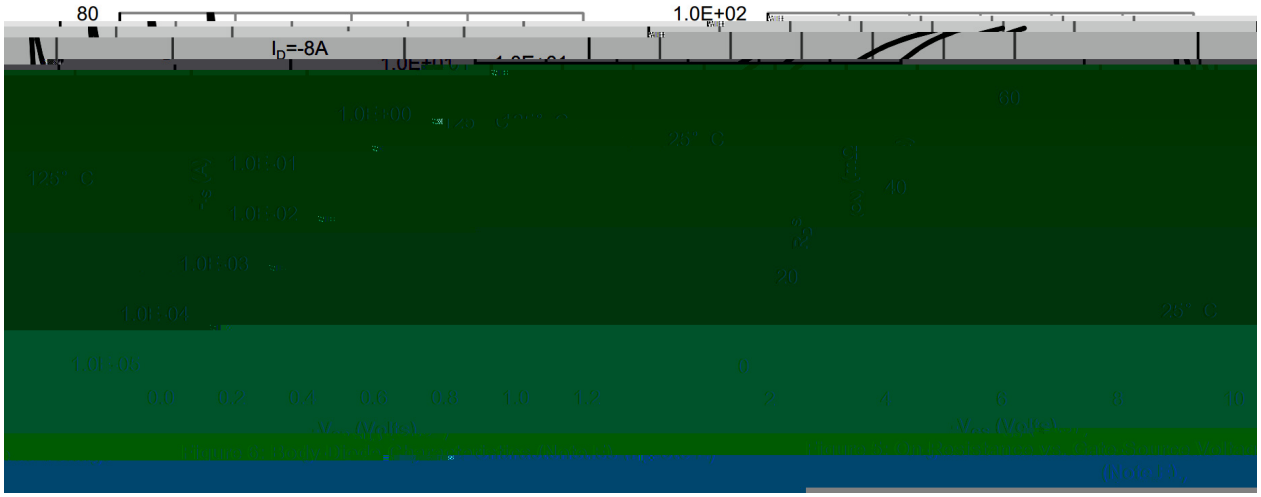


Figure 2: Transfer Characteristics





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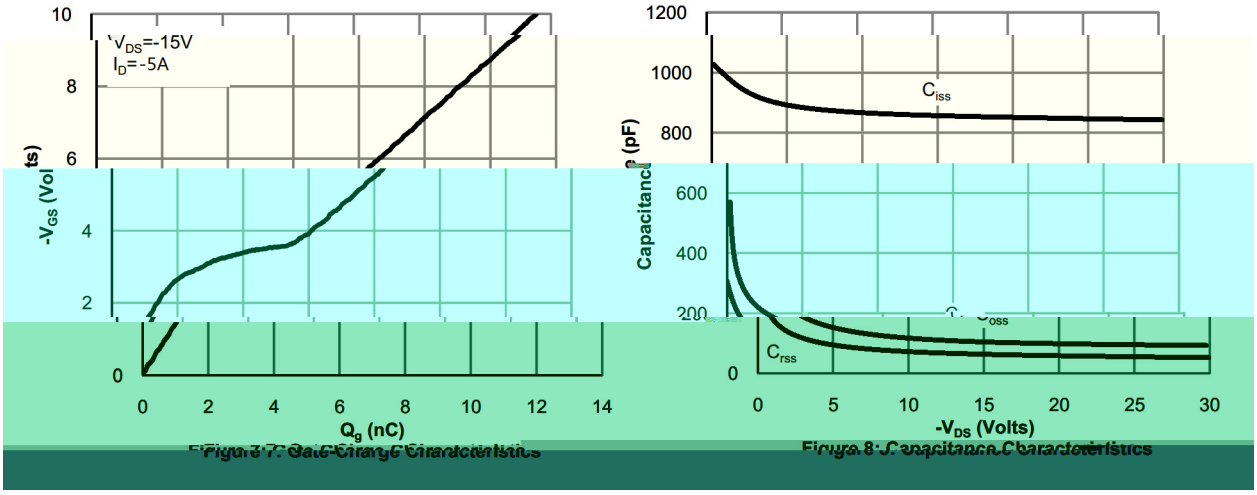
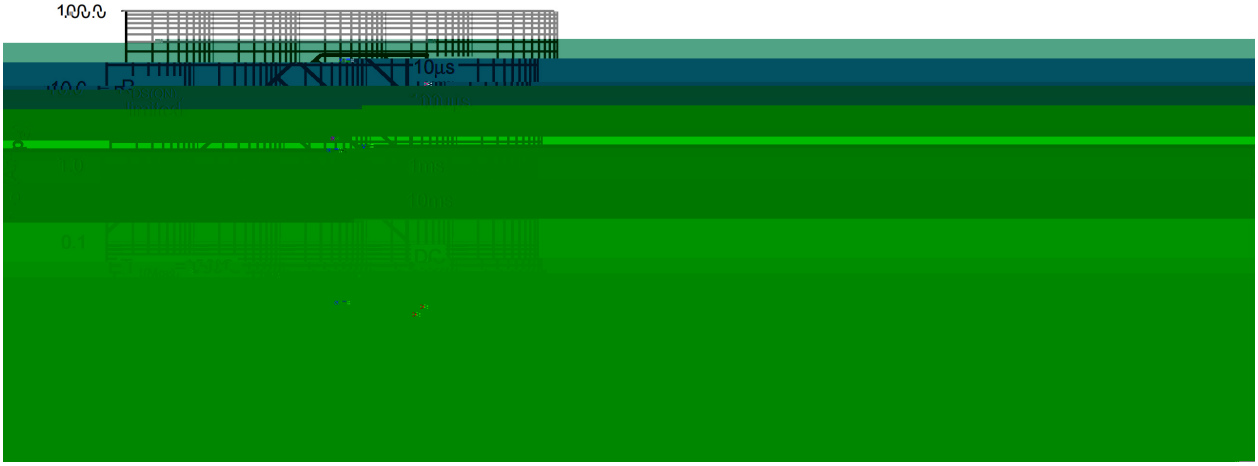
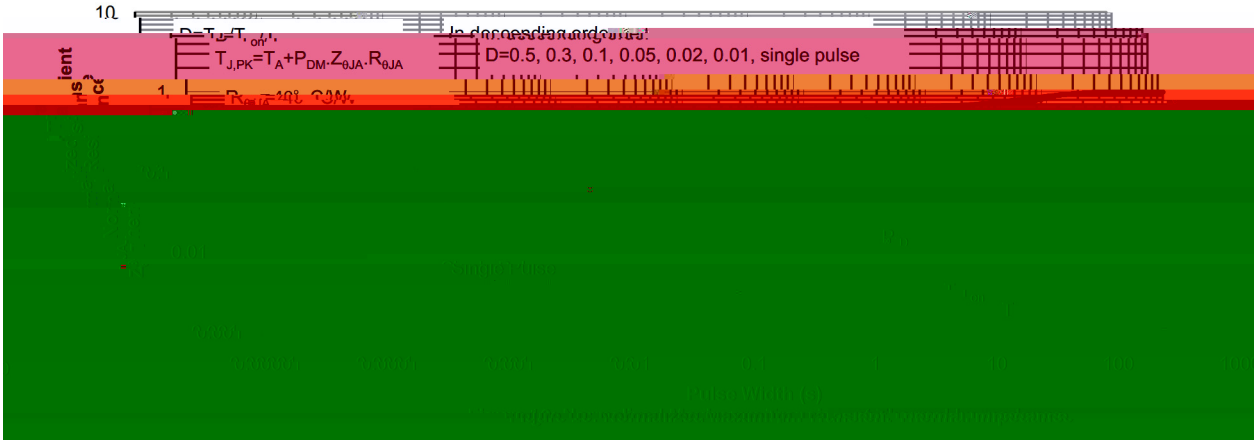
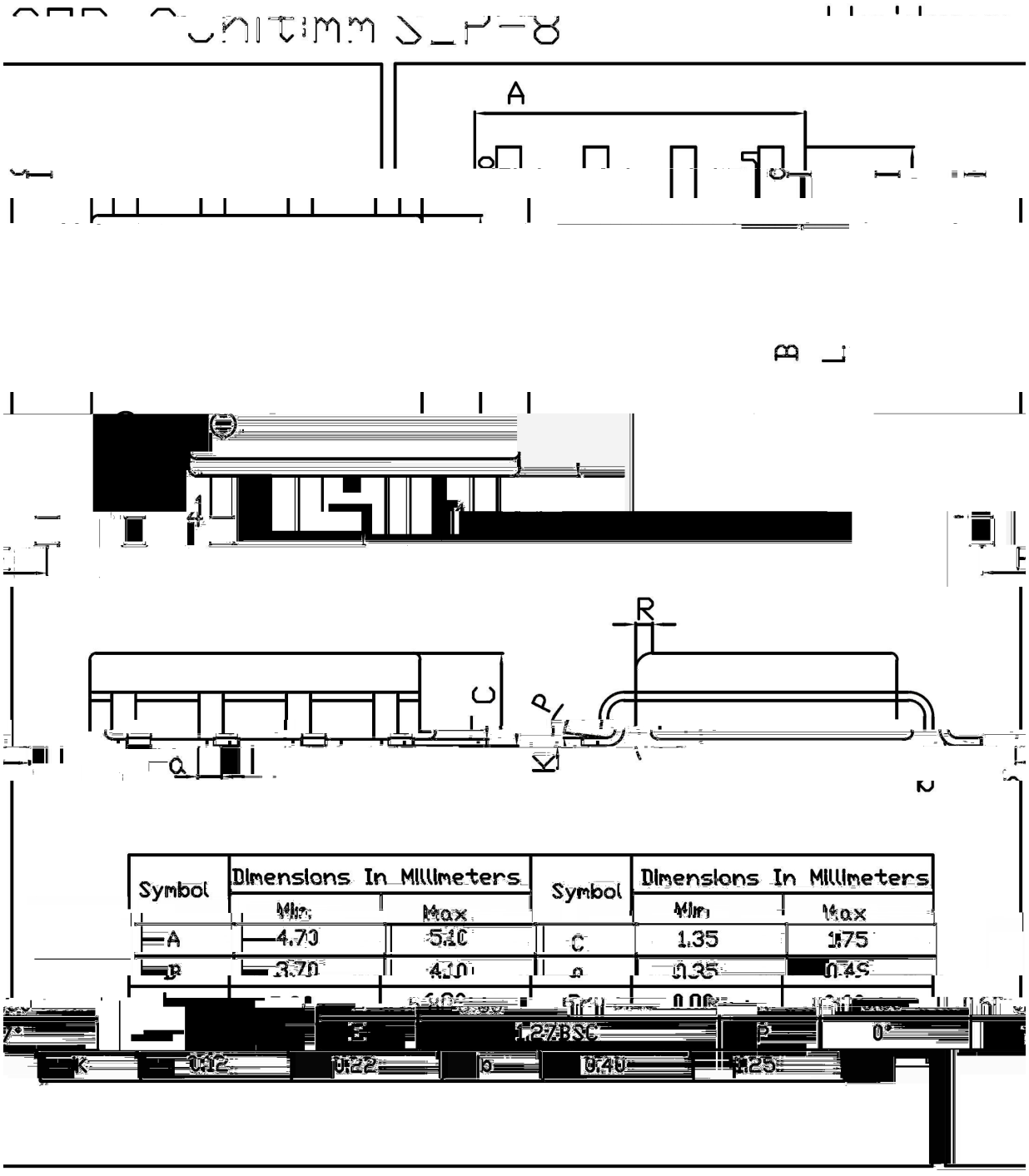


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics







Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.70	5.10	C	1.35	1.75
B	3.70	4.10	P	0.35	0.49

Rev.B Dec.-2023

Temperature Profile for IR Reflow Soldering(Pb-Free)

				Note:
1	150	180	60 90sec;	1.Preheating:150~180 , Time:60~90sec.
2	245±5		5±0.5sec;	2.Peak Temp.:245±5 , Duration:5±0.5sec.
3		2 10	/sec.	3. Cooling Speed: 2~10 /sec.

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ REEL