

Rev.B Aug.-2023

SOP-8

Complementary Enhancement MOSFET in a SOP-8 Plastic Package.

N-channel

$V_{DS}(V)=40V$ $I_D=15A$

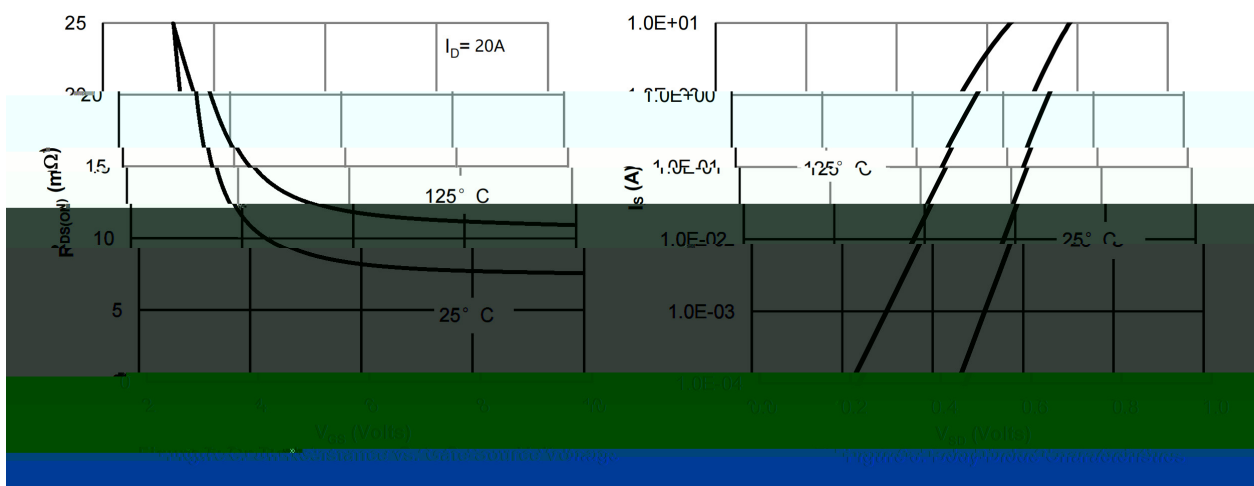
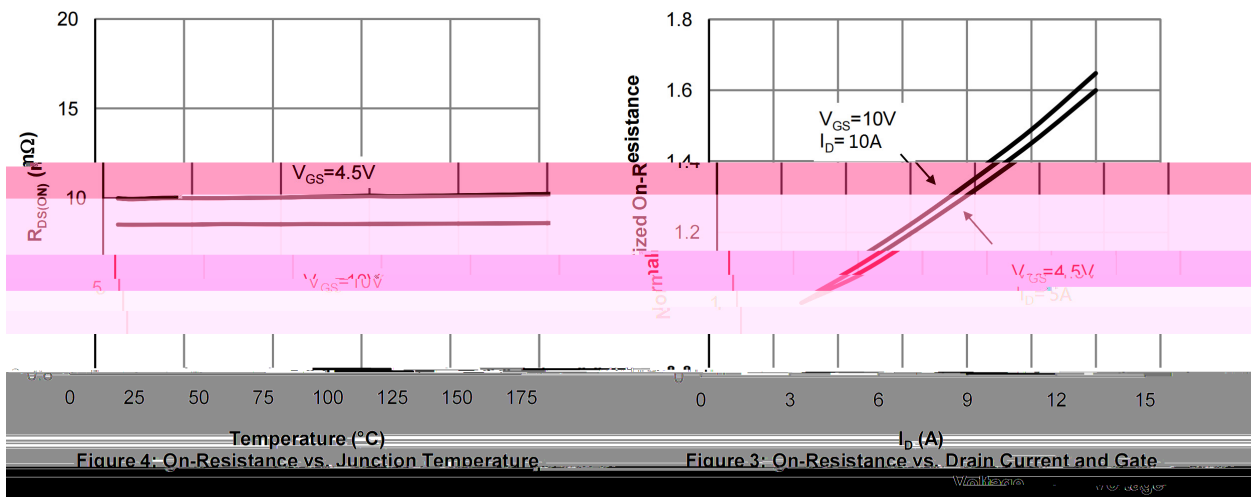
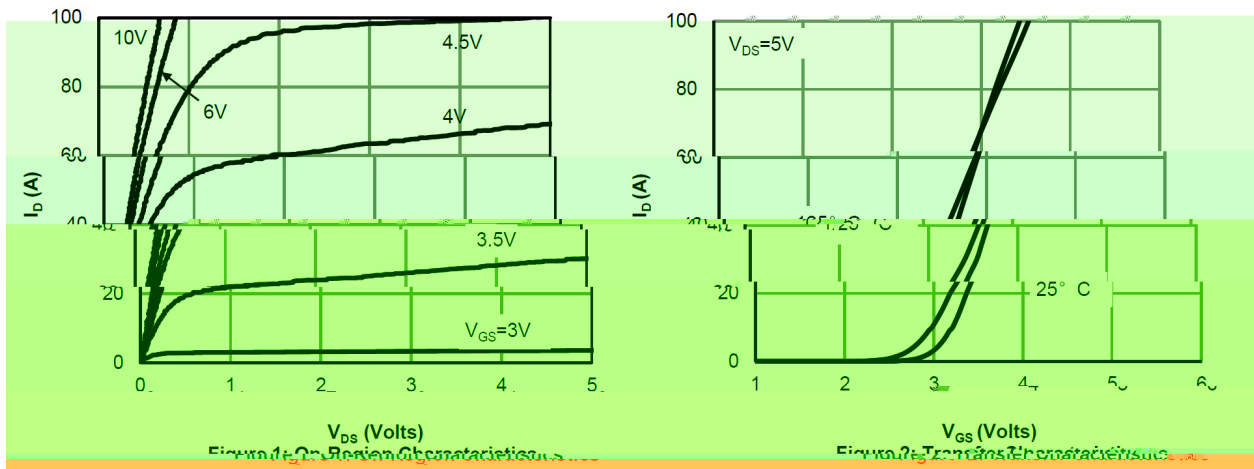
$R_{DS(ON)}@10V<9m$

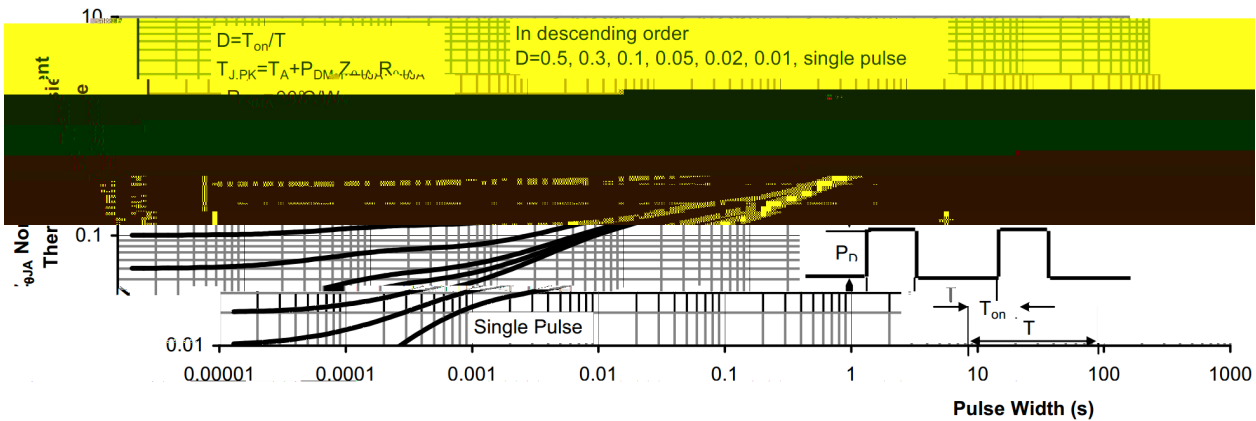
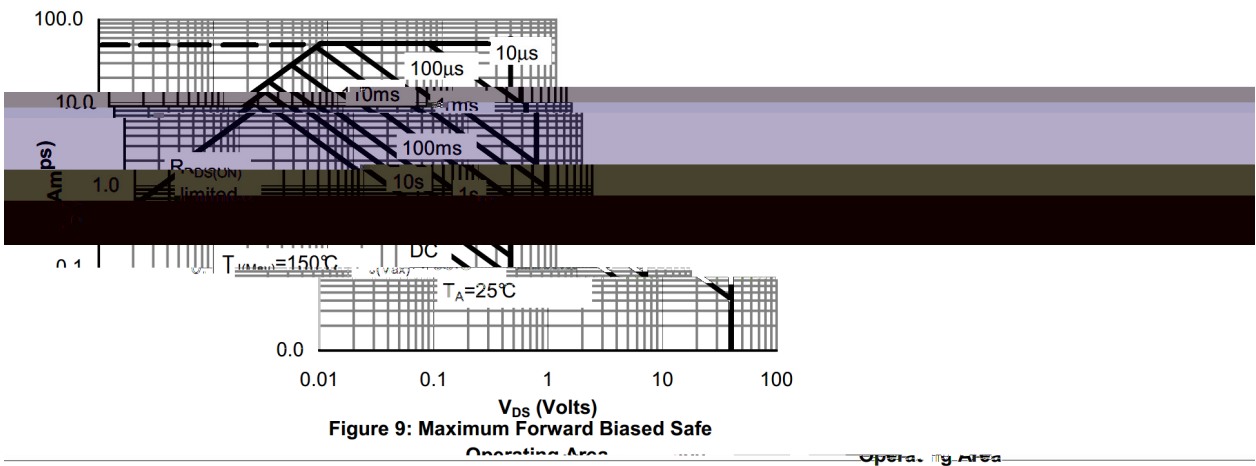
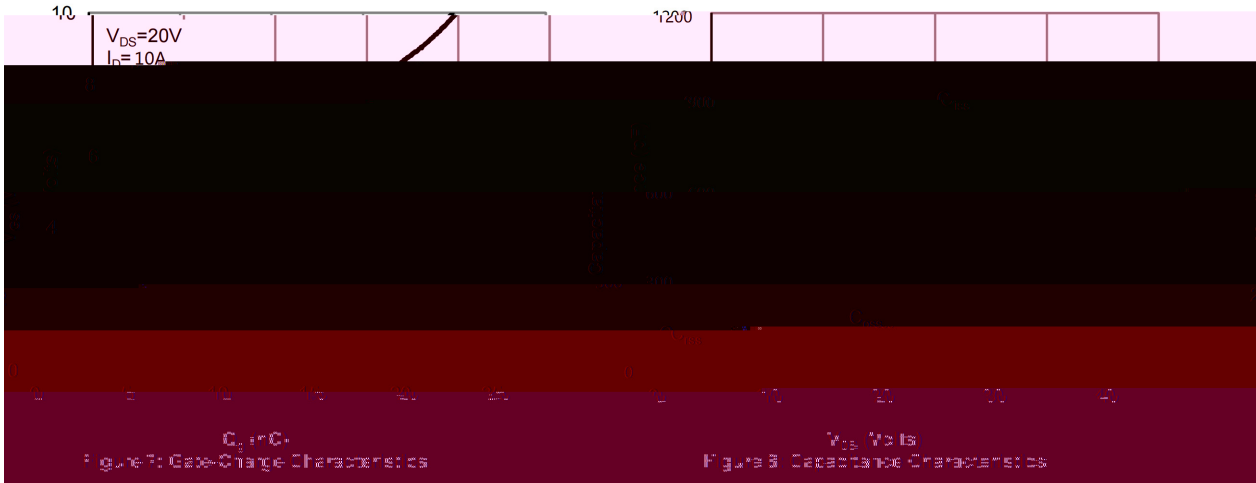
P-channel

$V_{DS}(V)=-40V$ $I_D=-11A$

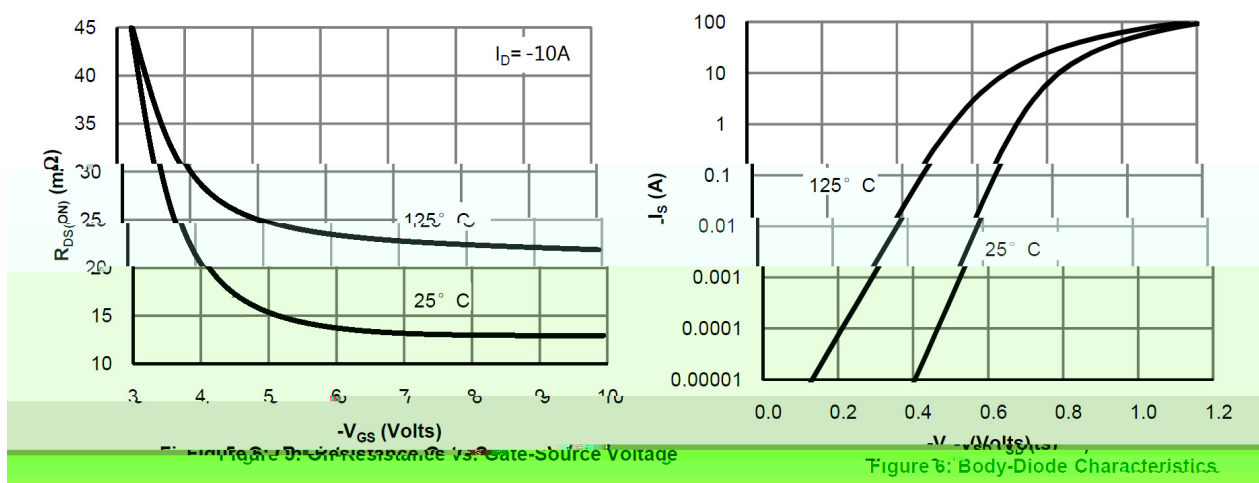
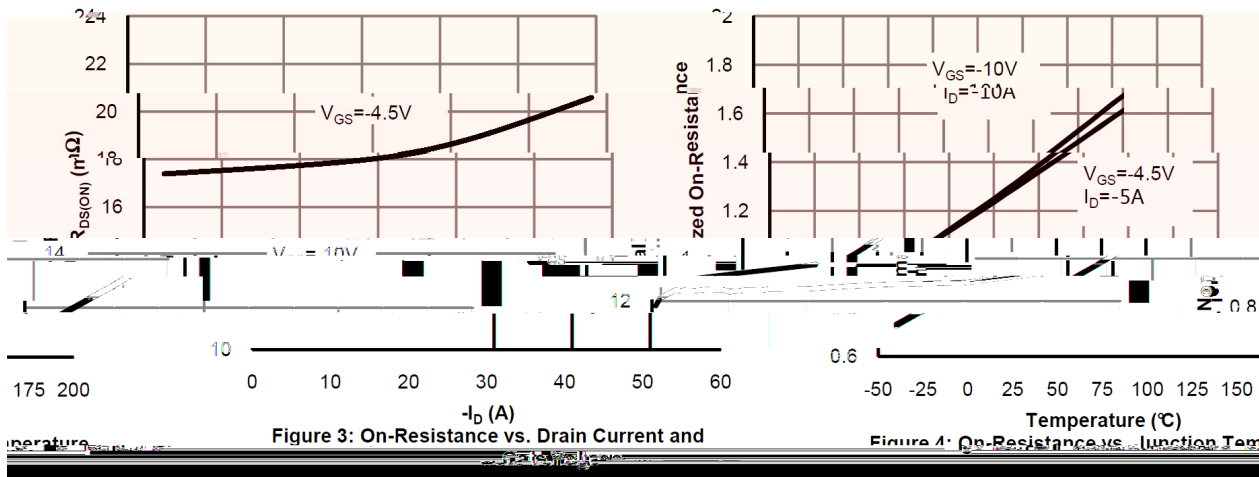
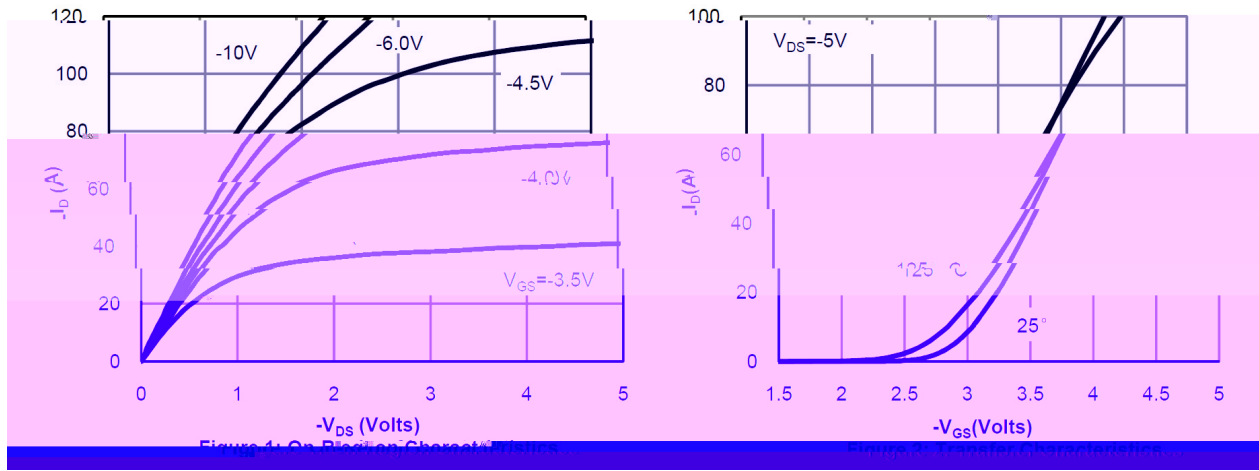
Parameter	Symbol	Rating		Unit
		N-channel	P-channel	
Drain-Source Voltage	V_{DS}	40	-40	V
Gate-Source Voltage	V_{GS}	± 20		V
Continuous Drain Current	I_D	15	-11	A
Pulsed Drain Current	I_{DM}	49	-35	A
Power Dissipation	P_D	3.5	3	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150		
Maximum Junction-to-Ambient	$R_{\theta JA}$	90		/W

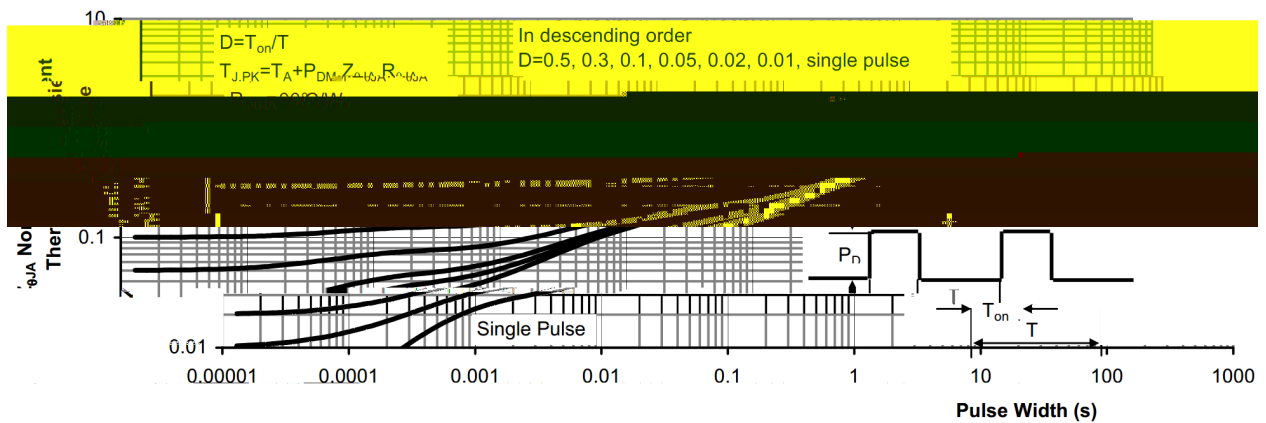
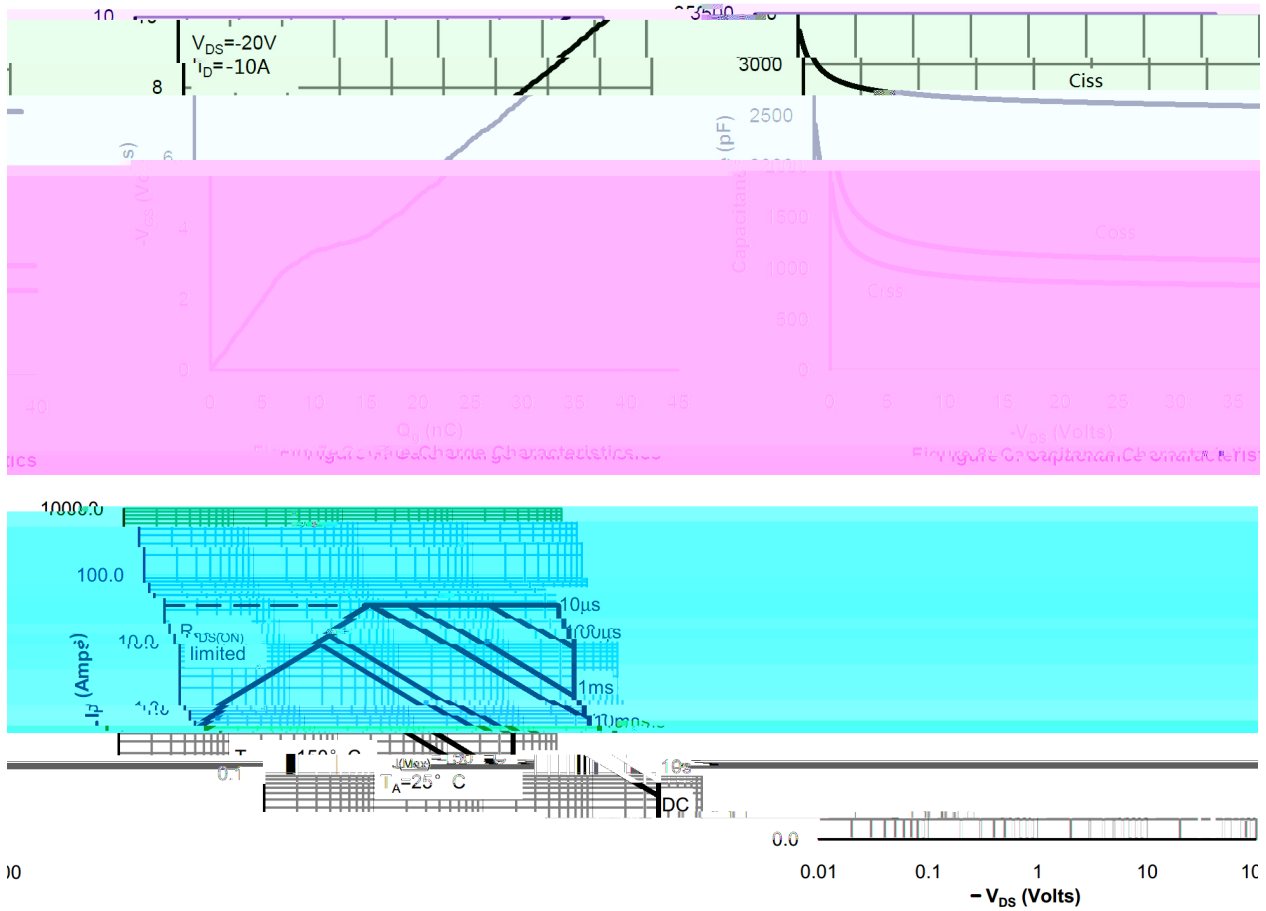
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\text{ A}$	40	47		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=40V$ $V_{GS}=0V$			1.0	A
Gate-Body leakage current	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\text{ A}$	1.0	1.6	2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=10A$		8	9	m
		$V_{GS}=4.5V$ $I_D=5A$		10	15	m
Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=1.0A$			1.2	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0MHz$		850		pF
Output Capacitance	C_{oss}			115		pF
Reverse Transfer Capacitance	C_{rss}			30		pF
Gate resistance	R_g	$V_{DS}=0V$ $V_{GS}=0V$ $f=1.0MHz$		2.4		Ω
Total Gate Charge	$Q_{g(10V)}$	$V_{GS}=10V$ $V_{DS}=20V$ $I_D=10A$		21		nC
Total Gate Charge	$Q_{g(4.5V)}$			8.6		nC
Gate-Source Charge	Q_{gs}			5.7		nC
Gate-Drain Charge	Q_{gd}			3		nC
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=20\text{ V}$ $V_{GS}=10V$ $R_L=1.0$ $R_{GEN}=3$		7.5		ns
Turn-On Rise Time	t_r			2.1		ns
Turn-Off Delay Time	$t_{d(off)}$			23		ns
Turn-Off Fall Time	t_f			3		ns



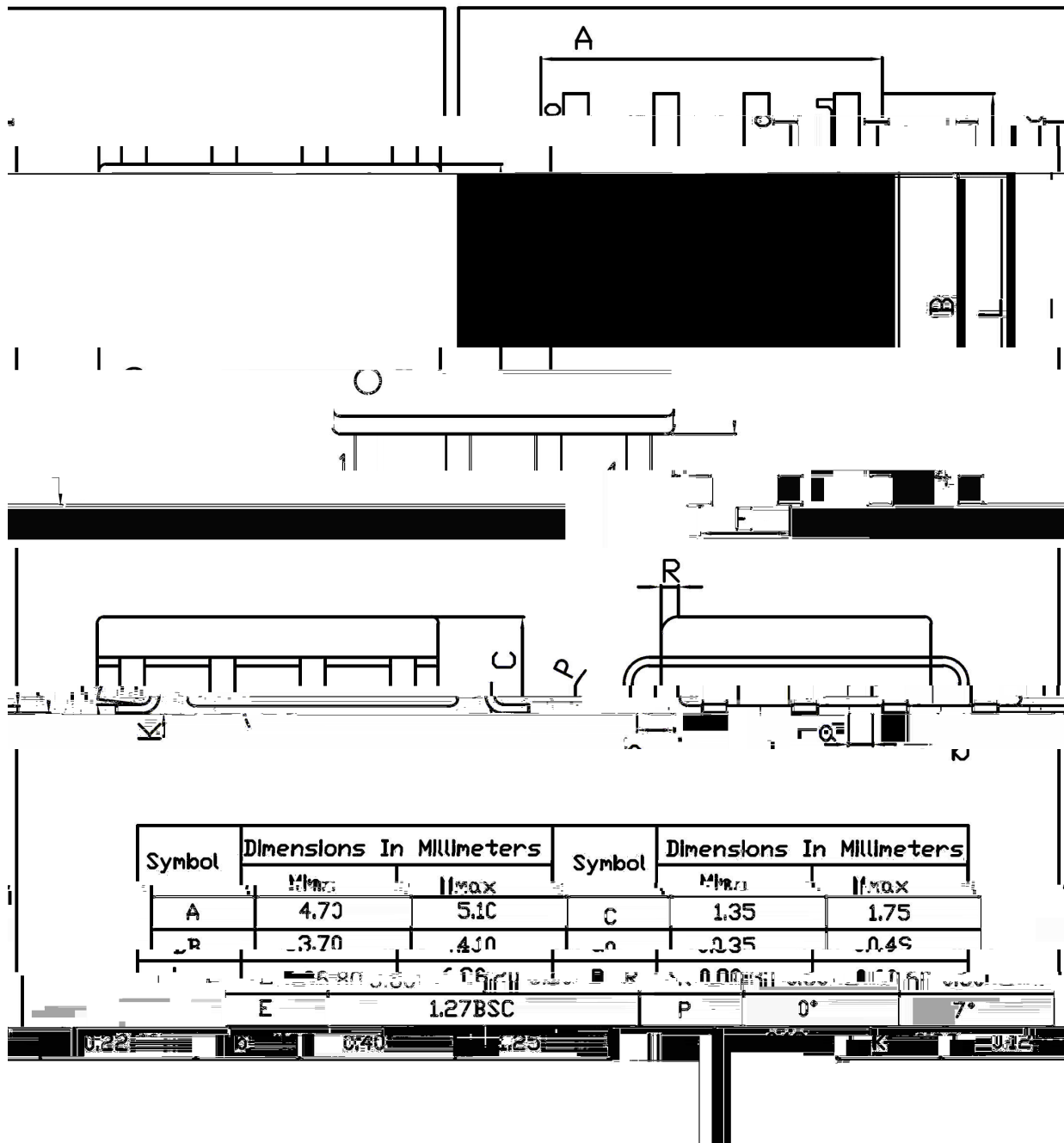


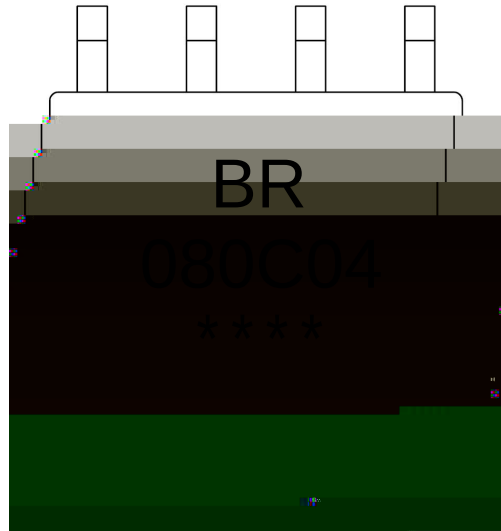
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=-250\text{ A}$	-40	-45		V
Zero Gate Voltage Drain Current	I_{DSS}	V				





000 0 UNITMM SLP-8





BR

080C04

Note:

BR: Company Code

080C04: Product Type

****: Lot No. Code, code change with Lot No

- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10 /sec.
- Note:

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL