

Rev.A Feb.-2025

DFN 3× 2-6L N

Common-Drain Dual N-Channel Enhancement MOSFET in a DFN3× 2-6L Plastic Package.

$V_{DS(V)}=20V$   $I_D=12.3A$

$R_{DS(ON)}@4.5V$  7.2m (Typ.6.6mR)

$R_{DS(ON)}@3.8V$  8.2m (Typ.6.9mR)

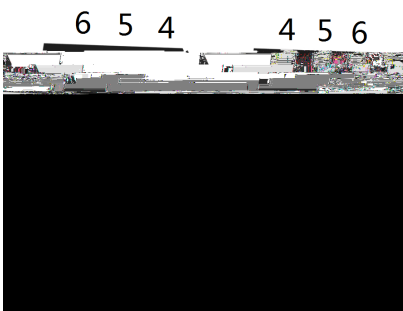
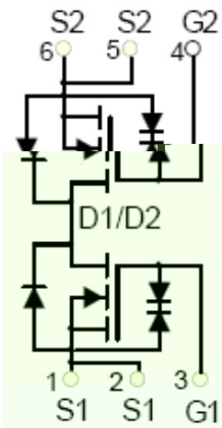
$R_{DS(ON)}@2.5V$  10.5m (Typ.8.1mR)

2KV

ESD protected up to 2KV,HF Product.

POL

Handheld Instruments,POL Applications,Battery Protection Applications.



See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		$V_{DSS}$	20	V
Drain Current		$I_D$	12.3	A
Drain Current - Pulsed		$I_{DM}$	62	A
Gate-Source Voltage		$V_{GS}$	$\pm 10$	V
Power Dissipation		$P_D$	1.7	W
Operating and Storage Temperature Range		$T_J, T_{stg}$	-55 to 150	
Junction-to-Ambient	Steady-State	$R_{JA}$	73.5	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V$ $I_D=250\mu A$	20	21		V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=20V$ $V_{GS}=0V$			1.0	$\mu A$
Gate-Body leakage current	$I_{GSS}$	$V_{GS}=\pm 10V$ $V_{DS}=0V$			$\pm 10$	$\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	0.5	0.7	1.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=4.5V$ $I_D=3A$		6.6	7.2	m
		$V_{GS}=4.0V$ $I_D=3A$		6.8	7.5	m
		$V_{GS}=3.8V$ $I_D=3A$		6.9	8.2	m
		$V_{GS}=3.1V$ $I_D=3A$		7.3	9.2	m
		$V_{GS}=2.5V$ $I_D=3A$		8.1	10.5	m
Diode Forward Voltage	$V_{SD}$	$V_{GS}=0V$ $I_S=1.0A$			1.2	V
Input Capacitance	$C_{iss}$	$V_{DS}=10V$ $V_{GS}=0V$ $f=1.0MHz$		1900		pF
Output Capacitance	$C_{oss}$			255		pF
Reverse Transfer Capacitance	$C_{rss}$			200		pF
Total Gate Charge	$Q_g$	$V_{GS}=4.5V$ $V_{DS}=15V$ $I_D=10A$		17.9		nC
Gate-Source Charge	$Q_{gs}$			1.5		nC
Gate-Drain Charge	$Q_{gd}$			4.7		nC
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=10V$ $V_{GS}=5.0V$ $R_L=1.35$ $R_{GEN}=3$		2.2		ns
Turn-On Rise Time	$t_r$			5.9		ns
Turn-Off Delay Time	$t_{d(off)}$			40		ns
Turn-Off Fall Time	$t_f$			90		ns

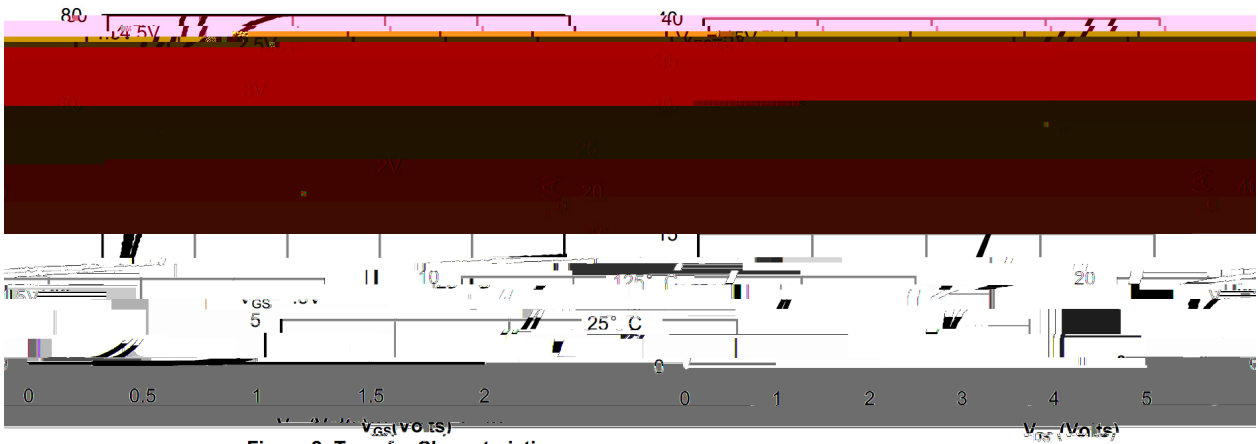
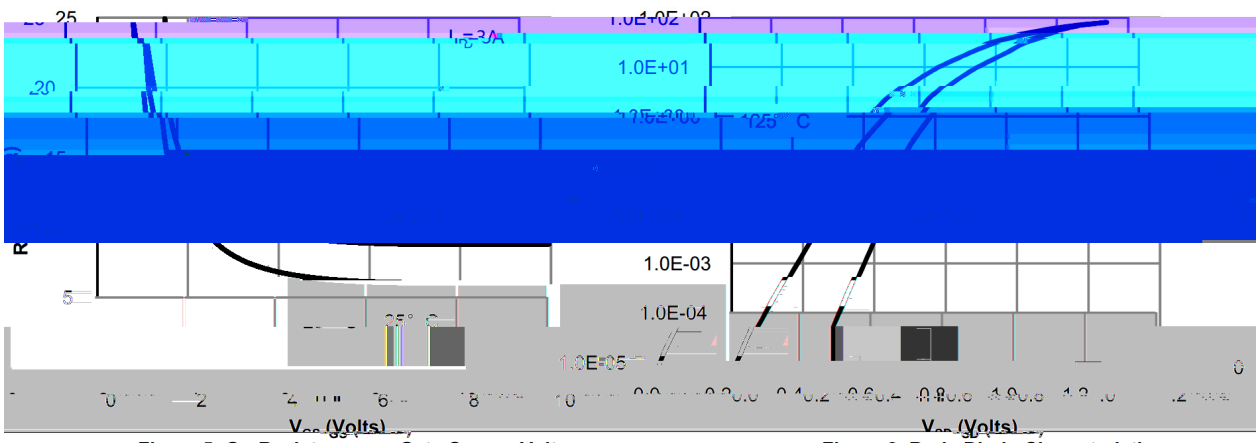
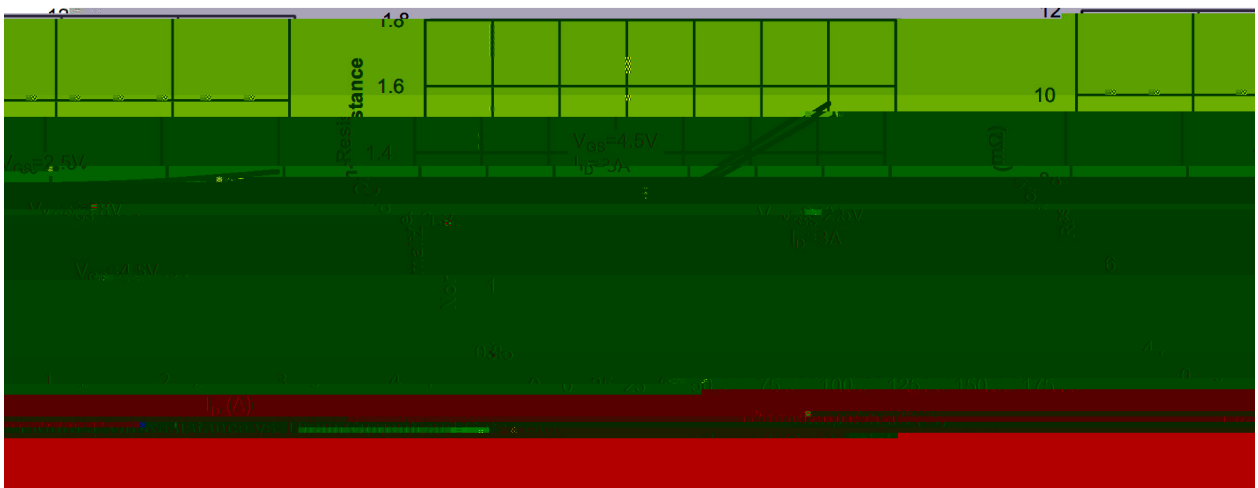
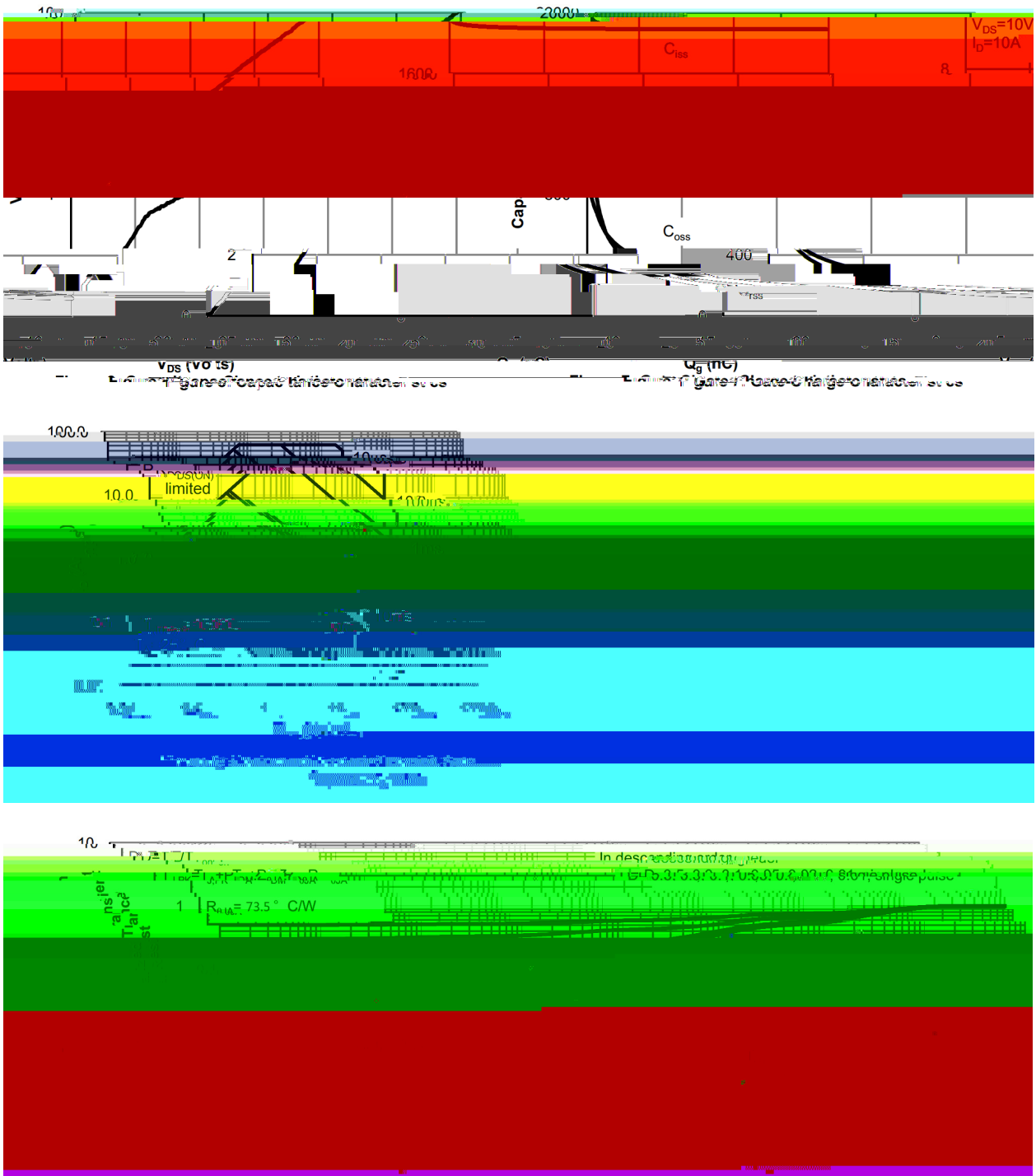


Figure 2: Transfer Characteristics

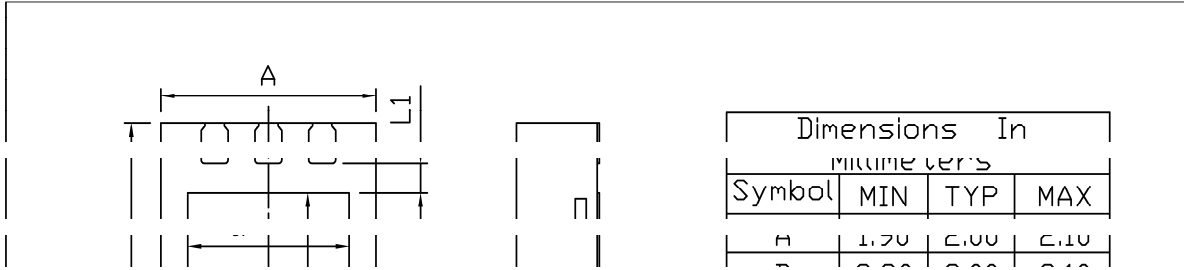
Fig 1: On-Region Characteristics

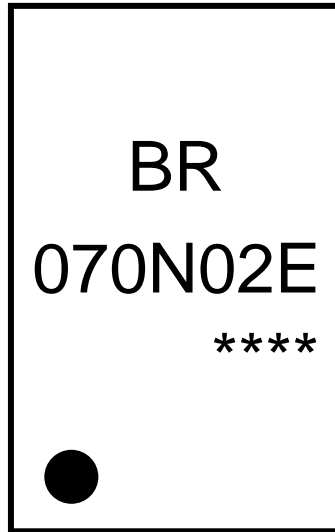




DFN3X2-6L

Unit:mm





BR  
070N02E  
\*\*\*\*

Note:

BR: Company Code  
070N02E: Product Type Code  
\*\*\*\*: Lot No. Code, code change with Lot No

Rev.A Feb.-2025