Min. current

TOX	XJ	FRC	TEMP	DLT	DWT
1225	1.3μ	.05	100°C	-.11	-.13

NA	VT	μ_o	IDS @ VDS = 5.0	DRAWN DIMENSIONS
1.3×10^{15}	-2.8	630	.214 ma	1.0/.35
2.0×10^{15}	-2.6	630	.0152 ma	.4/1.0

MAX current

TOX	XJ	FRC	TEMP	DLT	DWT
1100	1.3μ	.05	0°C	-.21	-.035

NA	VT	μ_o	IDS @ VDS = 5.0	DRAWN DIMENSIONS
$.5 \times 10^{15}$	-4.0	990	1.046 ma	1.0/.35
1.0×10^{15}	-3.9	990	.0784 ma	.4/1.0

Current/□ MIN CURRENT

short (.35)

$$.214 \times \frac{.35-.11}{1.0-.13} = .214 \times \frac{.24}{.87} = .059$$

narrow (.4)

$$.0152 \times \frac{1.0-.11}{.4-.13} = .0152 \times \frac{.89}{.27} = .050 \text{ ma/□} \quad 100K\Omega/\square$$

Current/□ MAX CURRENT

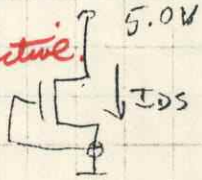
short (.35)

$$1.046 \times \frac{.35-.21}{1.0-.035} = 1.046 \times \frac{.14}{.965} = .152$$

narrow (.4)

$$.0784 \times \frac{1.0-.21}{.4-.035} = .0784 \times \frac{.79}{.365} = .17 \text{ ma/□} \quad 29.4K\Omega/\square$$

For any W/L, I = X ma/□ × $\left(\frac{W}{L}\right)_{effective}$



Nominal Depletion Conditions

$\Delta W = -.08$

$\Delta L = -.16$

$I_{DSSNOM} = 90\,mA/\square$ (Range = 50 mA/□ to 170 mA/□)

.4/1.0 Device

$$90\frac{mA}{\square} \times \frac{.4-.08}{1.0-.16} = 90 \times \frac{.32}{.84} = 34\,ma$$

.4/.35 Device

$$90\frac{mA}{\square} \times \frac{.4-.08}{.35-.16} = 90 \times \frac{.32}{.19} = 152\,ma$$

If $I_{DSS\,NOM} = 110\,mA/\square$,

$$I_{DSSo}\ @\ .4/1.0 = 34 \times \frac{110}{90} = 41.5\,ma$$

$$I_{DSSo}\ @\ .4/.35 = 152 \times \frac{110}{90} = 186\,ma$$