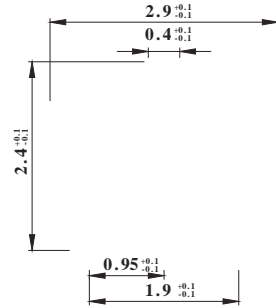


$P_{Dmax} = \frac{V_{DS} \cdot I_{Dmax}}{\theta_{JA}}$
 $\theta_{JA} = \frac{1}{\frac{1}{\theta_{JC}} + \frac{1}{\theta_{CA}}}$
 $T_J = T_{stg} + P_D \cdot \theta_{JA}$



Characteristic	Symbol	Max	Unit
Drain-Source Voltage	V_{DSS}	55	V
Gate- Source Voltage	V_{GS}	+12 -	V
Drain Current (continuous)	I_D	2.1	A
Drain Current (pulsed)	I_{DM}	10	A
Total Device Dissipation $T_A=25^\circ C$	P_D	1250	mW
Junction	T_J	150	
Storage Temperature	T_{stg}	-55to+150	

Characteristic	Symbol	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage ($I_D = 10\text{mA}, V_{GS}=0\text{V}$)	BV_{DSS}	55	—	—	V
Gate Threshold Voltage ($I_D = 250\mu\text{A}, V_{GS} = V_{DS}$)	$V_{GS(th)}$	0.6	—	2	V
Diode Forward Voltage Drop ($I_S=1\text{A}, V_{GS}=0\text{V}$)	V_{SD}	—	—	1	V
Zero Gate Voltage Drain Current $V_{GS}=0\text{V}, V_{DS}= 44\text{V},$ ($V_{GS}=0\text{V}, V_{DS}= 44\text{V}, T_A=55^\circ\text{C}$)	I_{DSS}	—	—	1 5	μA
Gate Body Leakage ($V_{GS}=\pm 12\text{V}, V_{DS}=0\text{V}$)	I_{GSS}	—	.		nA
Static Drain-Source On-State Resistance($I_D= 2.1\text{A}, V_{GS}= 4.5\text{V}$)	$R_{DS(ON)}$	—	125	160	m
Static Drain-Source On-State Resistance($I_D= 1.5\text{A}, V_{GS}= 2.5\text{V}$)	$R_{DS(ON)}$	—	160	200	m
Input Capacitance ($V_{GS}=0\text{V}, V_{DS}= 25\text{V}, f=1\text{MHz}$)	C_{ISS}	—	214	—	pF
Output Capacitance ($V_{GS}=0\text{V}, V_{DS}= 25\text{V}, f=1\text{MHz}$)	C_{OSS}	—	31	—	
Turn-ON Time ($V_{DS}= 30\text{V}, V_{GS}=10\text{V}, R_{GEN}=3^\circ\text{C}$)	$t_{(on)}$	—	2	—	n T