T_C =25

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	$I_{D@}$TC=25	25	A
	$I_{D@}$TC=75	19	A
	$I_{D@}$TC=100	15.8	A
Pulsed Drain Current	I_{DM}	50	A
Total Power Dissipation(TC=25)	P_D@TC=25	50	W
Total Power Dissipation(TA=25)		1.25	W

Operating /Span /MCIDpB/4. T7(urF2 10

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	2.4	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	65	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS} =0V,I_D =250uA	60			V
Gate Threshold Voltage	$V_{GS(TH)}$	V_{GS} =V_{DS}, I_D =250uA	1.2	1.8	2.5	V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=60V, V_{GS} =0V			1.0	uA
Gate- Source Leakage Current	I_{GSS}	V_{GS}=±20V ,V_{DS} =0V			100	nA
Static Drain-source On Resistance		V_{GS}=10V, I_D=12A				
		V_{GS}=4.5V, I_D=6A				
Forward Transconductance	g_{FS}	V_{DS} =25V, I_D=10A				
Source-drain voltage	V_{SD}	Is=12A				

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	C_{iss}	f = 1MHz	-	1430	-	pF
Output capacitance	C_{oss}		-	160	-	
Reverse transfer capacitance	C_{rss}		-	115	-	

Gate Charge characteristics(T_a = 25)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	Q_g	V_{DD} = 25V	-	25	-	nC
Gate - Source charge	Q_{gs}	I_D = 5A	-	4	-	
Gate - Drain charge	Q_{gd}	V_{GS} = 10V	-	9	-	

Note: ;

Fig.1

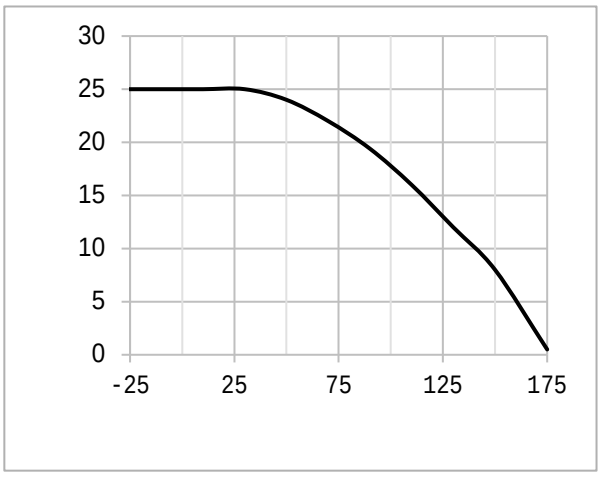


Fig.2 Typical output Characteristics

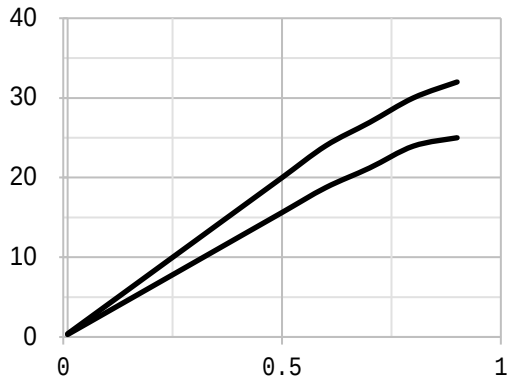
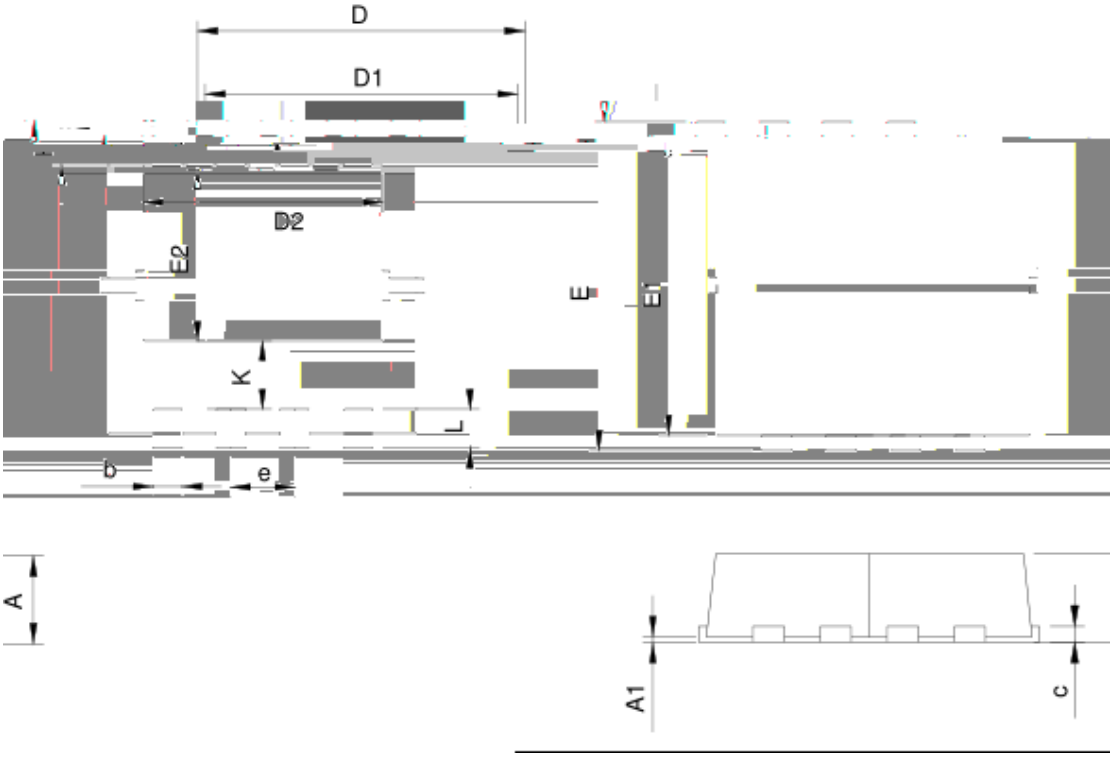


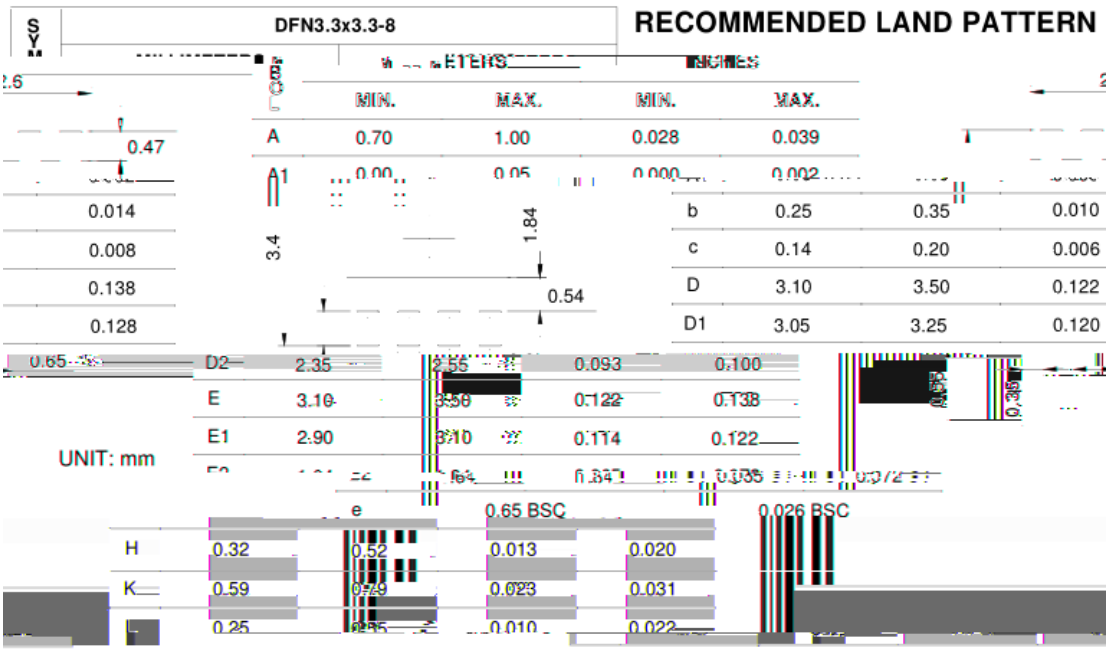
Fig.3 Threshold Voltage V.S Junction Temperature

Fig.4 Resistance V.S Drain Current

sions(DFN3×3)

Unit mm





SYMBOL	MILLIMETERS MIN.	MILLIMETERS MAX.	INCHES MIN.	INCHES MAX.
A	0.70	1.00	0.028	0.039
A1	0.00	0.05	0.000	0.002
b	0.25	0.35	0.010	0.014
c	0.14	0.20	0.006	0.008
D	3.10	3.50	0.122	0.138
D1	3.05	3.25	0.120	0.128
D2	2.35	2.55	0.093	0.100
E	3.10	3.50	0.122	0.138
E1	2.90	3.10	0.114	0.122
e	0.65 BSC		0.026 BSC	
H	0.32	0.52	0.013	0.020
K	0.59	0.79	0.023	0.031
L	0.25	0.45	0.010	0.022