V_{GS}=4.5V	5.6	m :	
	90	A	
$I_{D\ (Package\ Limited)}$	60	A	

Part Number	Package
	DFN5*6

Parameter	Symbol		Value	
Continuous Drain Current (Silicon Limited)	I_D	T_C	57	
Continuous Drain Current (Package Limited)		T_C	60	
		-		V
		-		
		L=0.4mH, T_C	80	mJ

		Unit
$R_{\theta JA}$		:
$R_{\theta JC}$		

(OHFWULFDO &KDUDFWHULVWLFV 7R WKHUZLVH VSHFLILHG

6WDWLF &KDUDFWHULVWLFV

Parameter	Symbol	Conditions	Value			Unit
			min	W \ S	max	
'UDLQ WR 6RXUFH %UHDNGRZQ 9ROWDJH	$V_{(BR)DSS}$	V_{GS}=0V, I_D=250PA	60	-	-	V
*DWH 7KUHVKROG 9ROWDJH	$V_{GS(th)}$	V_{GS}=V_{DS}, I_D=250 PA	1.0	1.6	2.4	
Zero Gate Voltage Drain Current	I_{DSS}	V_{GS}=0V, V_{DS}=60V, T_j	-	-	1	PA
		V_{GS}=0V, V_{DS}=60V, T_j	-	-	100	
Gate to Source Leakage Current	I_{GSS}	V_{GS}=±20V, V_{DS}=0V	-	-	±100	nA
Drain to Source on Resistance	$R_{DS(on)}$	V_{GS}=10V, I_D=20A	-	4.1	5.3	m :
		V_{GS}=4.5V, I_D=20A	-	5.6	7.5	
Transconductance	g_{IV}	V_{DS}=5V, I_D=20A	-	48	-	S
Gate Resistance	R_G	V_{GS}=0V, V_{DS} 2SHQ I 0+]	-	1.5	-	:

'\QDPLF &KDUDFWHULVWLFV

,QSXW &DSDFLWDQFH	C_{iss}	V_{GS}=0V, V_{DS} 9 I 0+]	-	2274	-	S)
2XWSXW &DSDFLWDQFH	C_{oss}		-	793	-	
5HYHUVH 7UDQVIHU &DSDFLWDQFH	C_{rss}		-	35	-	
7RWDO *DWH &KDUJH	Q_g(10V)	V_{DD}=30V, I_D=20A, V_{GS}=10V	-	36	-	nC
7RWDO *DWH &KDUJH	Q_g(4.5V)		-	18	-	
*DWH WR 6RXUFH &KDUJH	Q_{gs}		-	4.5	-	
*DWH WR 'UDLQ 0LOOHU &KDUJH	Q_{gd}		-	7.5	-	
Turn on Delay Time	$t_{d(on)}$	V_{DD}=30V, I_D=20A, V_{GS}=10V, R_G=10 :,	-	11	-	ns
Rise time	t_r		-	7	-	
7XUQ RII 'HOD\ 7LPH	$t_{G\ RII}$		-	35	-	
Fall Time	t_I		-	10	-	

5HYHUVH 'LRGH &KDUDFWHULVWLFV

'LRGH)RUZDUG 9ROWDJH	V_{SD}	V_{GS}=0V, I_F=20A	-	0.9	1.2	V
Reverse Recovery Time	t_{rr}	V_R=30V, I_F=20A, dI_F G W	-	30	-	ns
5HYHUVH 5HFRYHU\ &KDUJH	Q_{rr}		-	53	-	nC

)LJ 7\SLFDO 2XWSXW &KDUDFWHULVWLFV

Figure 2. On-Resistance vs. Gate-Source Voltage

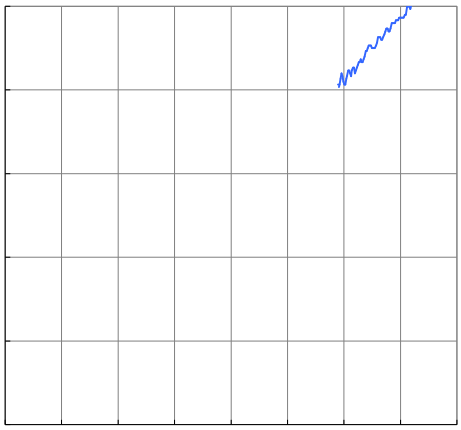
Figure 3. On-Resistance vs. Drain Current and Gate Voltage

)LJXUH 1RUPDOL]HG 2Q 5HVLVWDQFH YV -XQFWLRQ

)LJXUH 7\SLFDO 7UDQVIHU &KDUDFWHULVWLFV

)LJXUH 7\SLFDO 6RXUFH 'UDLQ 'LRGH)RUZDUG 9R

)LJXUH 7\SLFDO *DWH &KDUJH YV *DWH



)LJXUH 7\SLFDO &DSDFLWDQFH YV 'UDLQ WR 6RX

)LJXUH 0D[LPXP 6DIH 2SHUDWLQJ $UHD

)LJXUH 0D[LPXQ 'UDLQ &XUUHQW YV &DVH 7HPSH

)LJXUH 1RUPDOL]HG 0D[LPXP 7UDQVLHQW 7KHUPDO ,PSHGDQFH -XQFWLRQ

,QGXFWLYH VZLWFKLQJ 7HVW	

*DWH &KDUJH 7HVW	

8FODPSHG ,QGXFWLYH 6ZLWFKLQJ 8,6 7HVW	

Diode Recovery Test	

Package Outline

DFN5x6_P, 8 Leads

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A3	0.254 REF		0.010REF	
D	4.680	5.120	0.184	0.202
E	[illegible]	[illegible]	[illegible]	[illegible]
D1	3.610	4.110	0.142	0.162
E1	3.380	3.780	0.133	0.149
D2	4.800	5.000	0.189	0.197
E2	5.640	5.840	0.222	0.229
k	1.100	1.390	0.043	0.055
b	0.330	0.510	0.013	0.020
e	1.270TYP		1.270TYP	
L	0.510	0.711	0.020	0.028