



Ordering Information:

Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@TC=25}$	160	A
	$I_{D@TC=75}$	121	A

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	1.5	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	37	° C/W
Soldering temperature, wave soldering for 10s	T_{sold}	-	-	265	° C

Electronic Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS} = 0V, I_D = 250\mu A$	100			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 250\mu A$	1.2		2.5	V
Drain-Source Leakage Current	I_{DSS}	$V_{DS} = 100V, V_{GS} = 0V$			1.0	μA
Gate- Source Leakage Current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$ $V_{GS} = 10V, I_D = 25A @$ $TC = 25$			100	nA

Static Drain-source On
Resistance

Turn-Off Delay time		4	/3		45		ns
Turn-Off Fall time					9		ns
		0.			33		ns
		-	/..		170		nC
		-	1.				

Note:

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Fig.1 Gate-Charge Characteristics

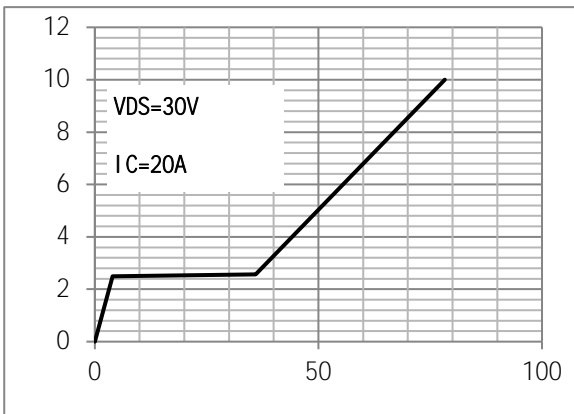


Fig.2 Capacitance Characteristics

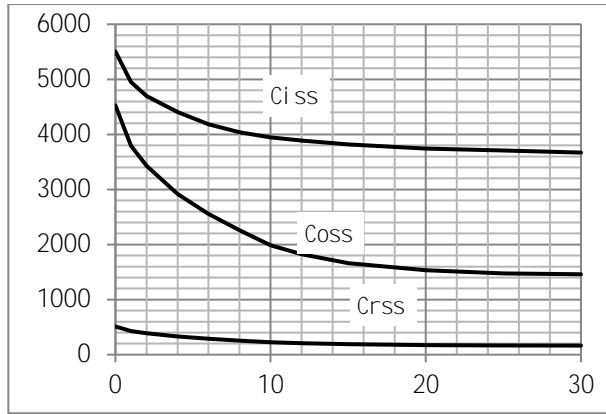


Fig.3 Power Dissipation

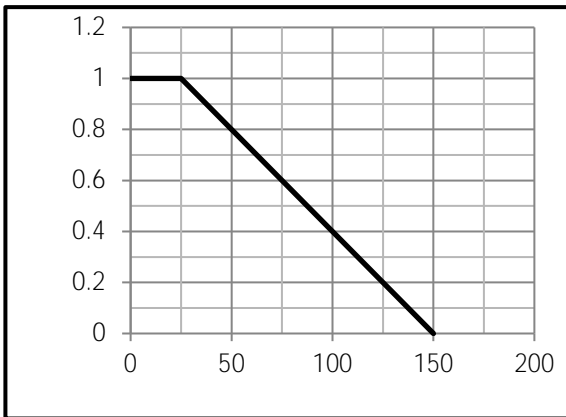


Fig.4 Typical output Characteristics

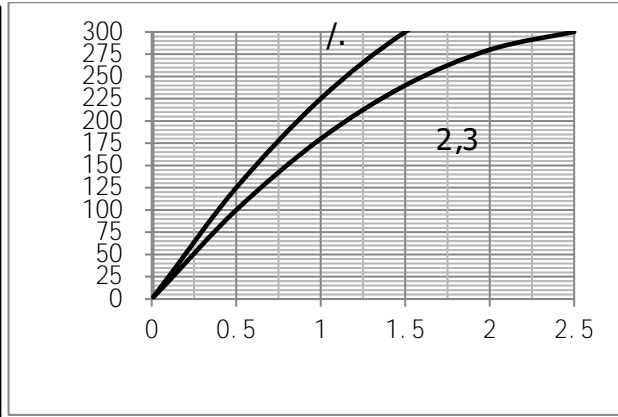


Fig.5 Threshold Voltage V.S Junction Temperature

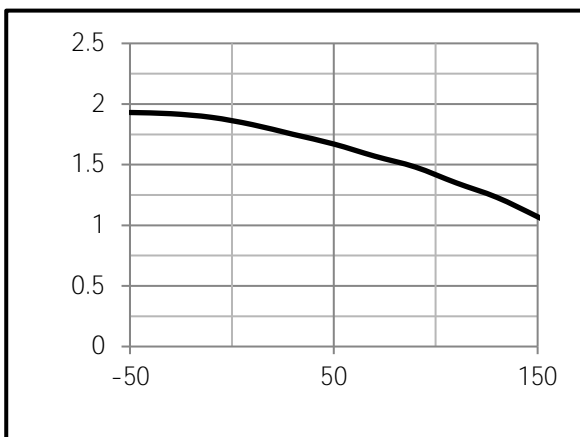
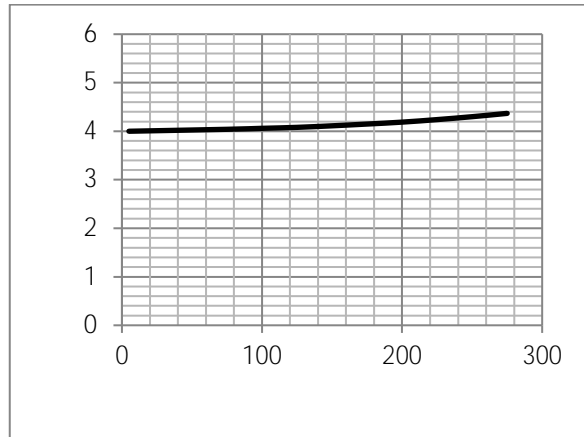


Fig.6 Resistance V.S Drain Current





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Fig.9 SOA Maximum Safe Operating Area

Fig.10 ID-Junction Temperature

Fig.11 Switching Time Measurement Circuit

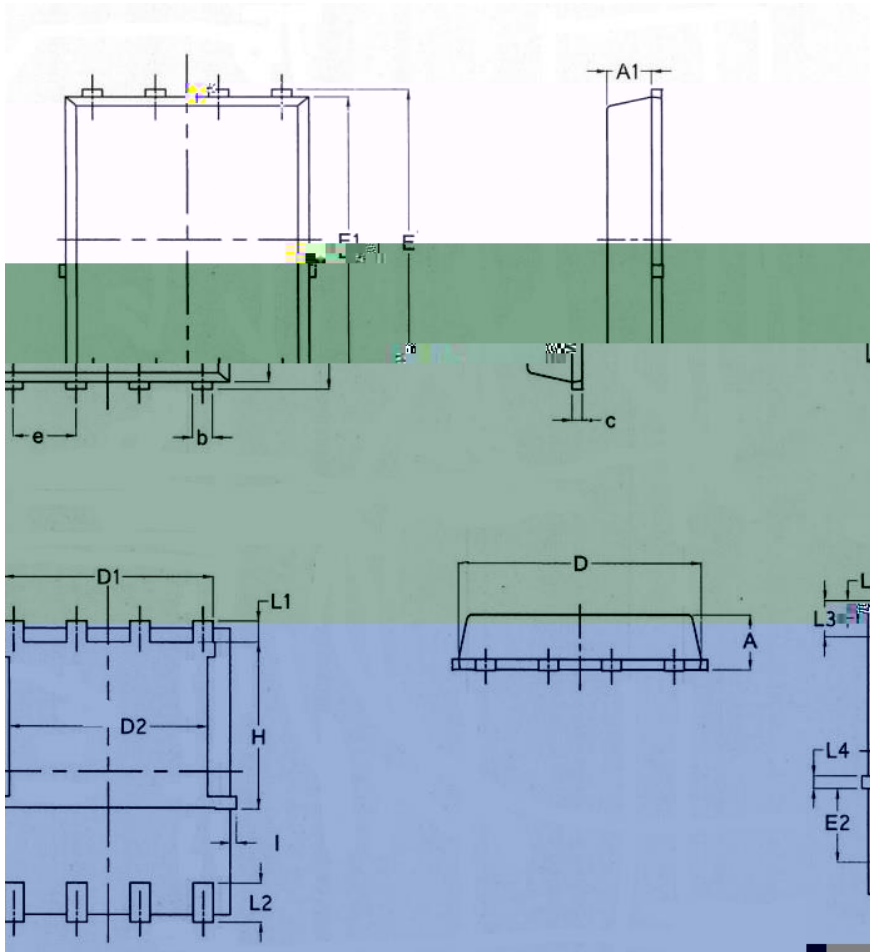
Fig.12 Gate Charge Waveform





Dimensions DFN5x6

Unit mm



SYMBOL	COMMON					
	MM			INCH		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.90	1.10	1.17	0.0354	0.0433	0.0461
A1	0.824	0.897	0.97	0.0324	0.0353	0.0382
b	0.33	0.41	0.50	0.0130	0.0161	0.0197
c	0.150	0.20	0.250	0.0059	0.0079	0.0098
D	4.80	4.90	5.00	0.1890	0.1929	0.1969
D1	3.91	4.22	4.36	0.1539	0.1661	0.1717
D2	3.95	4.00	4.15	0.1555	0.1575	0.16
E	5.90	6.05	6.15	0.2323	0.2382	0.24
E1	5.65	5.76	5.85	0.2224	0.2268	0.23
E2	1.10	/	/	0.0433	/	/
L	1.27 BSC			0.050 BSC		
L	0.05	0.15	/	/	/	/