



General Description

It combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.

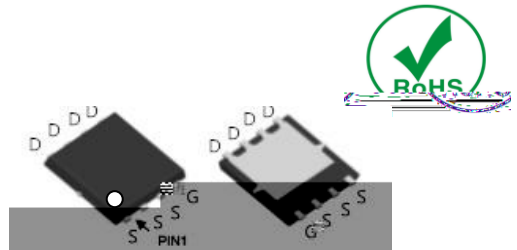
Features

Trench technology
 $R_{DS(ON)}$ to minimize conductive loss

Application

Synchronous Rectification for AC-DC/DC-DC converter
 Power Tools

Product Summary



Ordering Information:

	REEL TAPE
	3000

Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	120	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_D @ TC=25$	125	A
	$I_D @ TC=75$	95	A
	$I_D @ TC=100$	78	A
Pulsed Drain Current	I_{DM}	375	A
Total Power Dissipation($TC=25$)	$P_D @ TC=25$	125	W
Total Power Dissipation($TA=25$)	$P_D @ TA=25$	3.4	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy @ $L=0.1mH$	E_{AS}	200	mJ



Note:

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Fig.1 Gate-Charge Characteristics

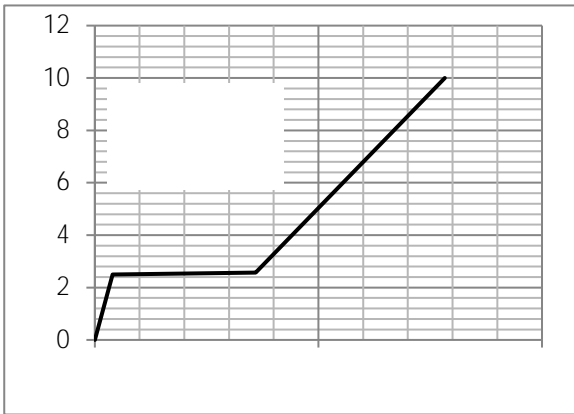


Fig.2 Capacitance Characteristics

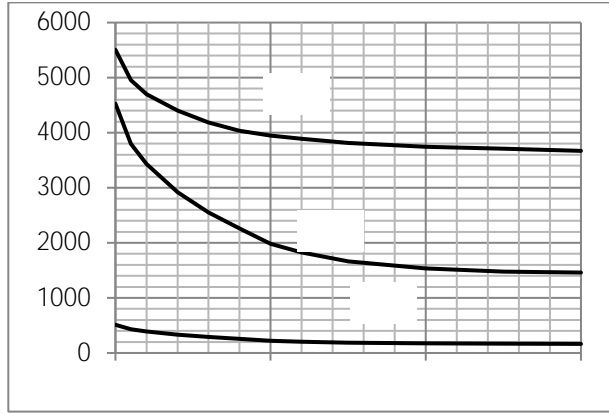


Fig.3 Power Dissipation

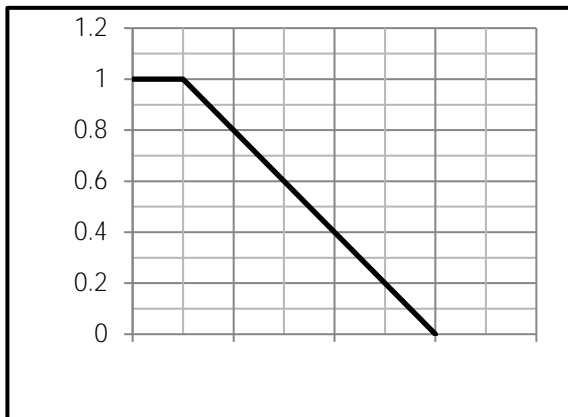


Fig.4 Typical output Characteristics

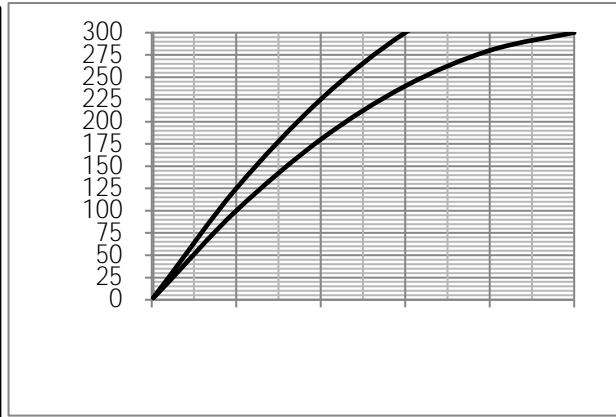


Fig.5 Threshold Voltage V.S Junction Temperature

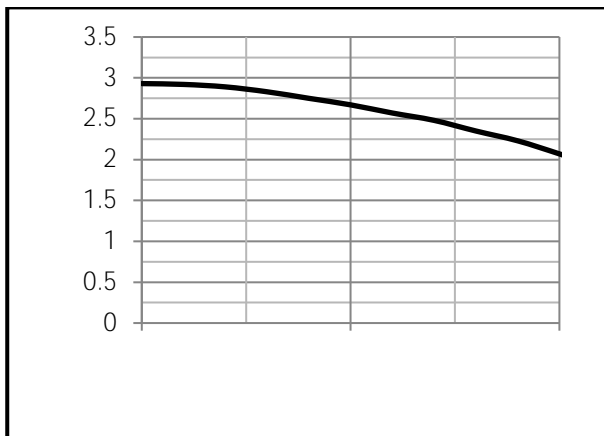


Fig.6 Resistance V.S Drain Current

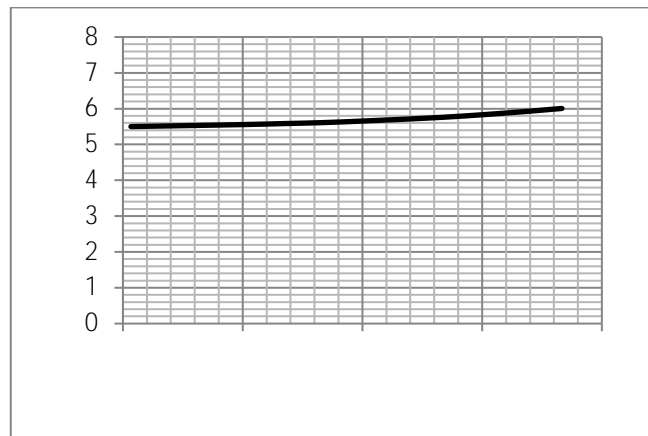






Fig.13 Switching Time Measurement Circuit

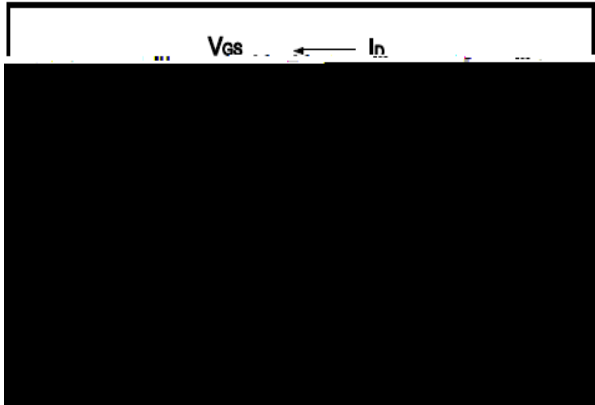


Fig.14 Gate Charge Waveform

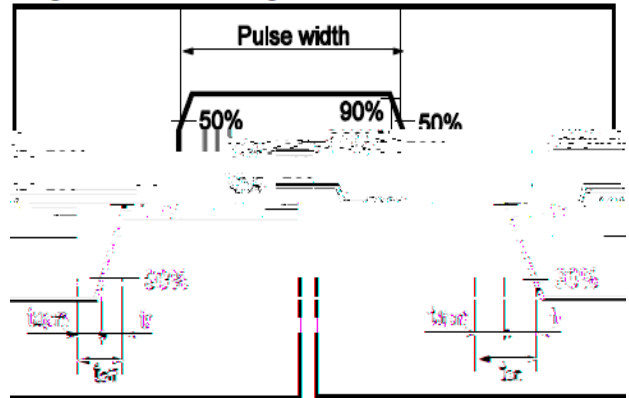


Fig.15 Avalanche Measurement Circuit

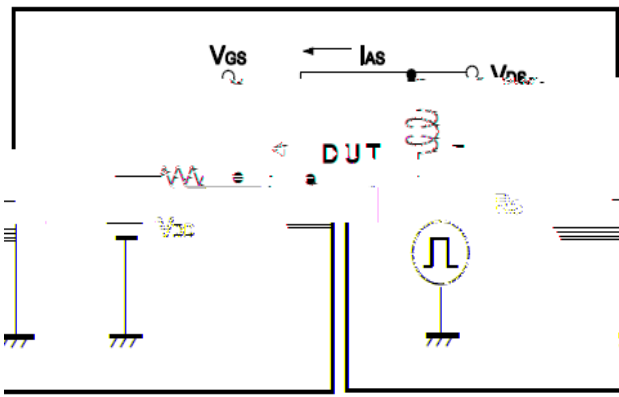
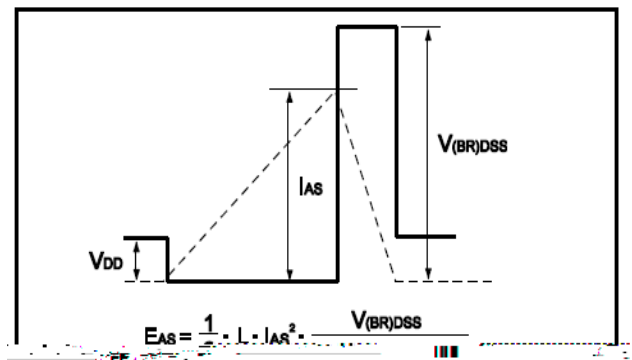


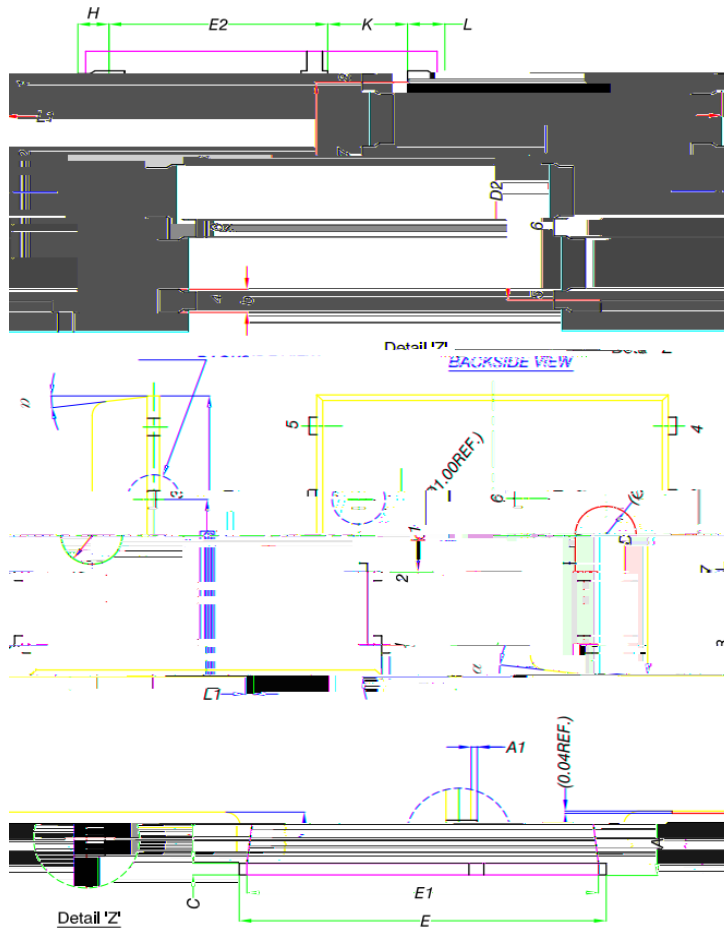
Fig.16 Avalanche Waveform





Dimensions DFN5x6

Unit mm



MILLIMETERS

D1	4.80	4.90	5.00
D2	3.67	3.81	3.96
	5.90	6.00	6.10
E1	5.20	5.35	5.50
e	1.27 BSC		
	0.41	0.51	0.61
	H		
	K		
	0.51 0.61 0.71		
	0.51 0.61 0.71		
	12°		