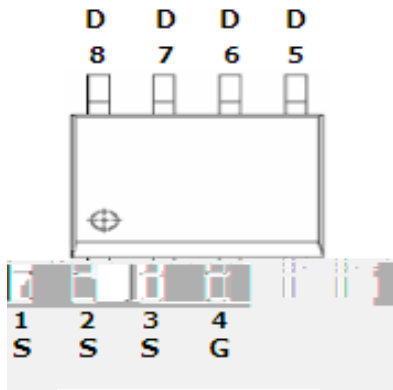


DESCRIPTION

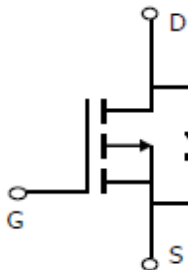
T STP4407 P-C
, DMOS
T
T

**PIN CONFIGURATION
SOP-8**



FEATURE

- -30V/-10A, $R_{DS(ON)} = 15 \Omega$ @ $V_{GS} = -10V$
- -30V/-6.0A, $R_{DS(ON)} = 24 \Omega$ @ $V_{GS} = -4.5V$
- S $R_{DS(ON)}$
- E - DC
- SOP-8



PART MARKING



Y : Year Code
A : Produce Code
B : Process Code

ABSOLUTE MAXIMUM RATINGS (T = 25°C U)

Parameter	Symbol	Typical	Unit
D -S V	VDSS	-30	V
G -S V	VGSS	20	V
C D C (TJ=150°C)	ID	-10 -6	A
P D C	IDM	-50	A
C S C (D C)	IS	-20	A
P D	PD	2.5 2.0	
O J T	TJ	-55/150	°C
S T R	TSTG	-55/150	°C
T R -J A	RθJA	50	°C/

ELECTRICAL CHARACTERISTICS ($T = 25^{\circ}\text{C}$ U)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Static						
D B -S V	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=-250\text{ A}$	-30			V
G V T	$V_{GS()}$	$V_{DS}=V_{GS}, I_D=-250\text{ A}$	-1.0		-2.5	V
G L C	I_{GSS}	$V_{DS}=0V, V_{GS}= 20V$			100	A
D G C V	I_{DSS} $T_J=55^{\circ}\text{C}$	$V_{DS}=-30V, V_{GS}=0V$			-1	A
		$V_{DS}=-30V, V_{GS}=0V$			-5	
D R - O -	$R_{DS()}$	$V_{GS}=-10V, I_D=-10A$ $V_{GS}=-4.5V, I_D=-6.0A$		15 24	20 32	Ω
F T		$V_{DS}=-5V, I_D=-10A$		26		S
D F V	V_{SD}	$I_S=-1$				

TYPICAL CHARACTERISTICS

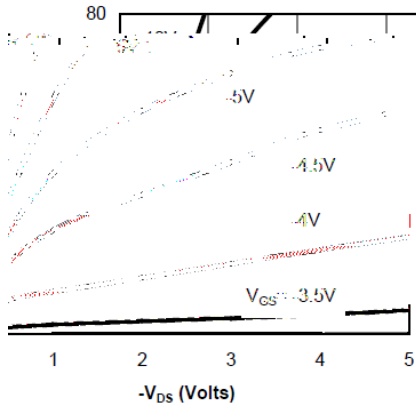


Figure 1: On-Region Characteristics

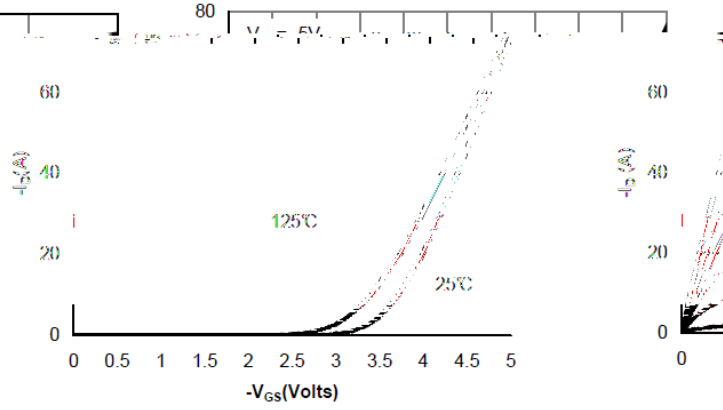


Figure 2: Transfer Characteristics

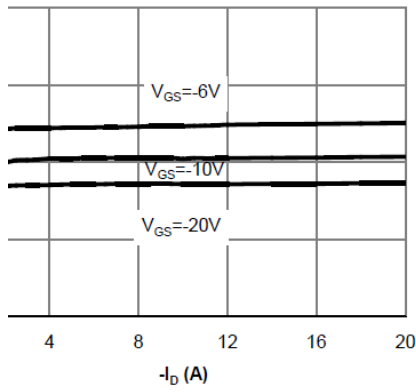


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

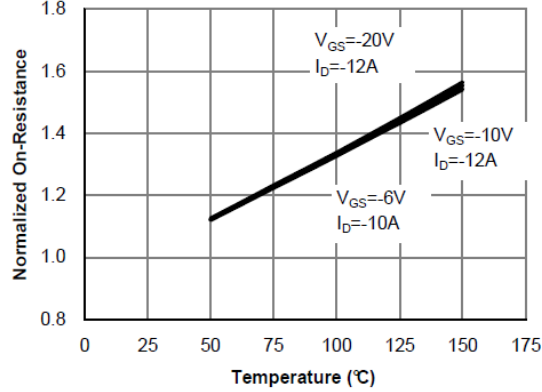
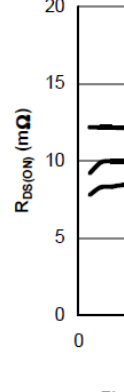


Figure 4: On-Resistance vs. Junction Temperature



Fig

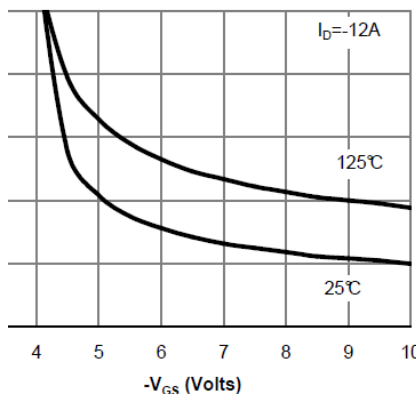


Figure 6: On-Resistance vs. Gate Voltage

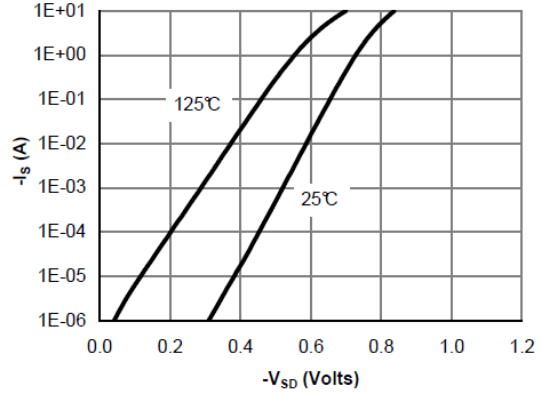


Figure 7: On-Resistance vs. Drain-Source Voltage

TYPICAL CHARACTERISTICS

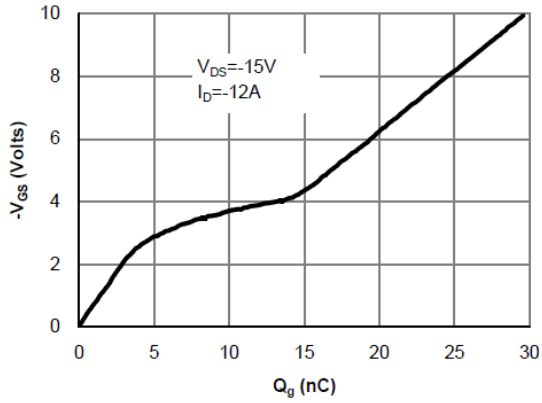


Figure 7: Gate-Charge Characteristics

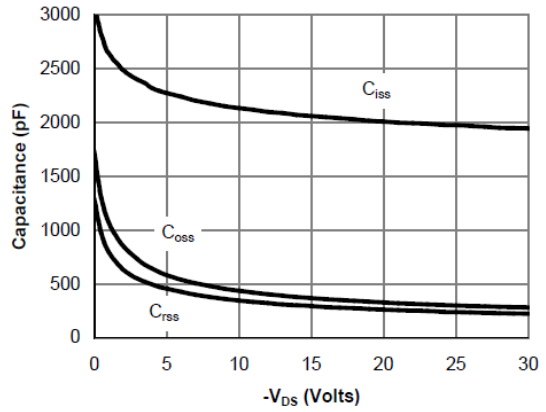


Figure 8: Capacitance Characteristics

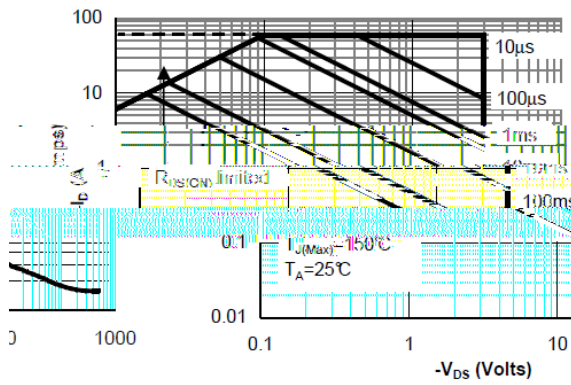


Figure 9: Maximum Forward Biased Safe Operating Area (Note E)

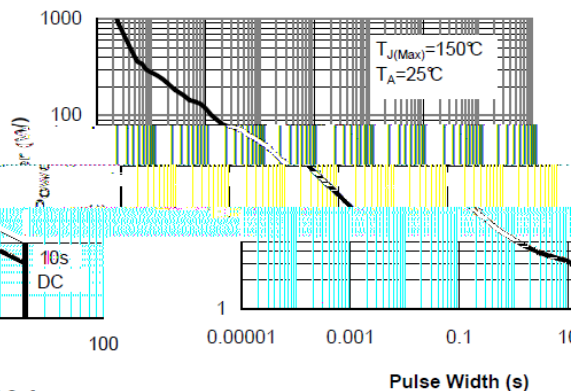


Figure 10: Single Pulse Power Ratio to-Ambient (Note E)

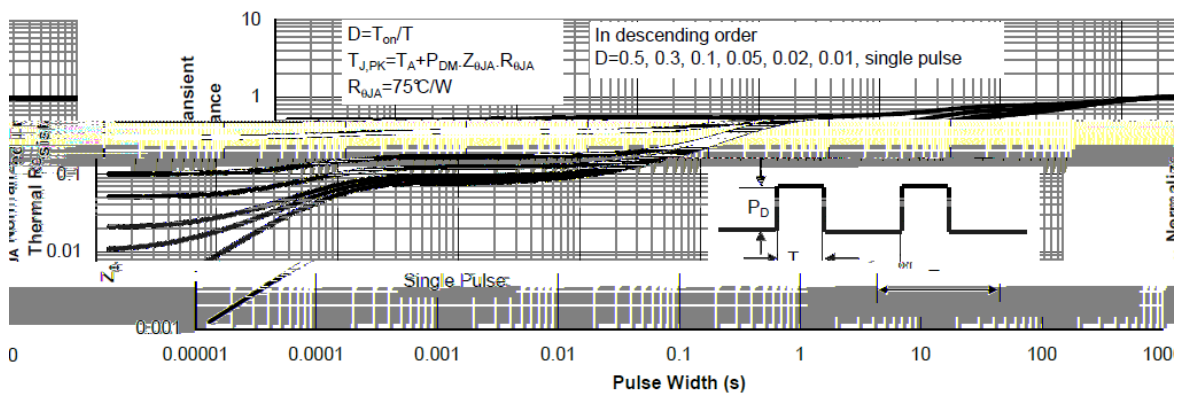
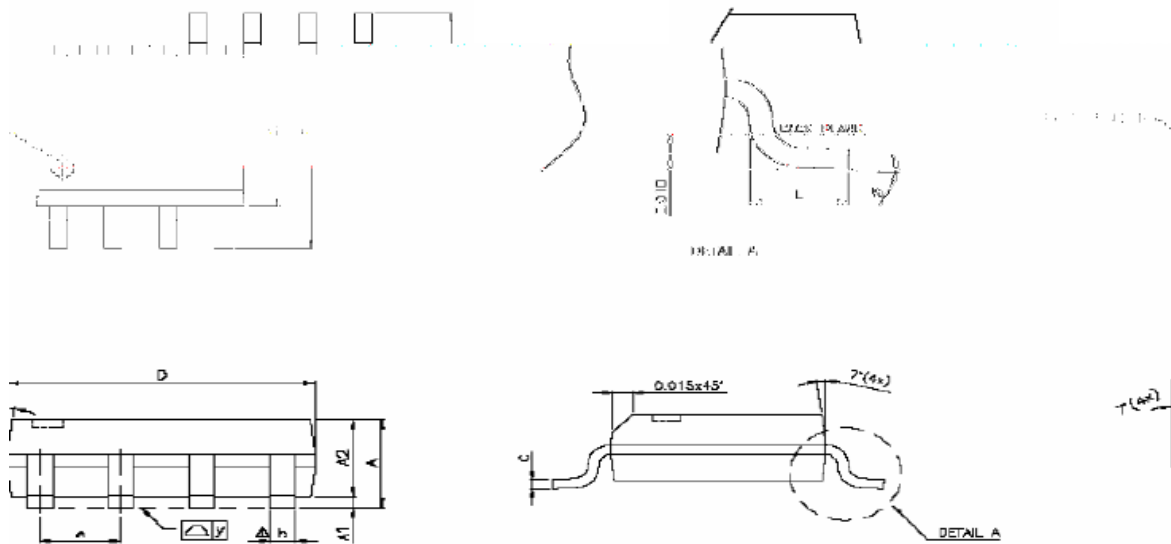


Figure 11: Normalized Maximum Transient Thermal Impedance (Note E)

PACKAGE OUTLINE SOP-8P



SYMBOLS	DIMENSIONS IN MILLIMETERS			DIMENSIONS IN INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.47	1.60	1.73	0.058	0.063	0.068
A1	—	—	—	—	1.43	—
A2	0.057	—	—	—	—	—
a	0.01	0.013	0.016	0.0004	0.0005	0.0006
b	0.25	0.0075	0.008	0.0098	—	—
c	4.95	0.189	0.191	0.195	—	—
D	6.00	0.220	0.222	0.225	—	—
e	5.80	4.86	4.750	0.230	0.191	0.187
E	1.27	—	—	0.050	—	—
F	0.71	1.27	0.015	0.028	0.050	—
G	—	0.076	—	—	0.003	—
H	—	8°	6°	—	5°	—
I	—	—	—	—	—	—
J	—	—	—	—	—	—
K	—	—	—	—	—	—
L	—	—	—	—	—	—
M	—	—	—	—	—	—
N	—	—	—	—	—	—
O	—	—	—	—	—	—
P	—	—	—	—	—	—
Q	—	—	—	—	—	—
R	—	—	—	—	—	—
S	—	—	—	—	—	—