STP4407

P C E M MOSFET

- 10A

DESCRIPTION

T STP4407 P-C

ELECTRICAL CHARACTERISTICS (T = 25℃ U)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Static						
D -S B V	$V_{(BR)DSS}$	V_{GS}=0V,ID=-250 A	-30			V
G T V	$V_{GS(\ )}$	V_{DS}=V_{GS},ID=-250 A	-1.0		-2.5	V
G L C	I_{GSS}	V_{DS}=0V,V_{GS}= 20V			100	A
G V D C	I_{DSS} T_J=55℃	V_{DS}=-30V,V_{GS}=0V			-1	A
		3V_{DS}=-30V,V_{GS}=0V			-5	
D - O - R	$R_{DS(\ )}$	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=-19TJ 9.84 0 0 9.84 0 0 T 8.219T 9.84 0 ( )TJ330.490.0487
V

TYPICAL CHARACTERICTICS

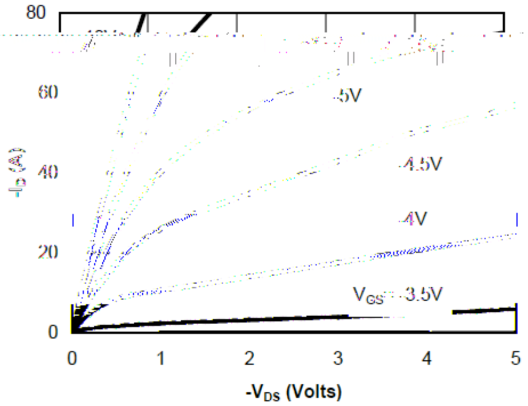


Figure 1: On-Region Characteristics

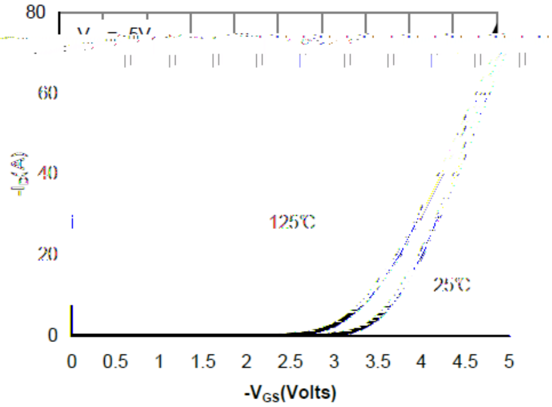


Figure 2: Transfer Characteristics

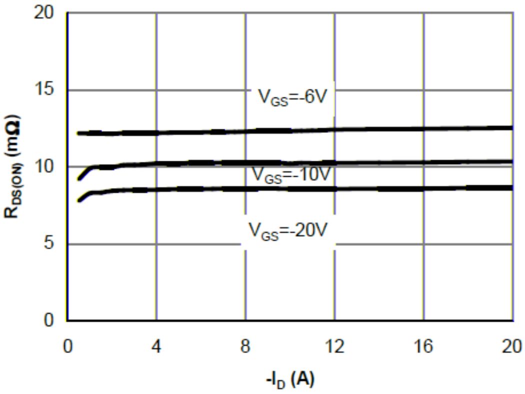


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

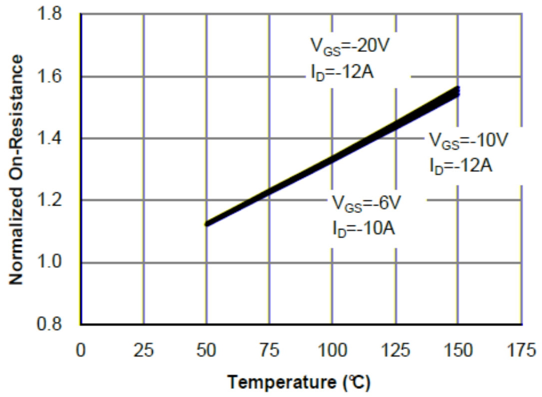


Figure 4: On-Resistance vs. Junction Temperature

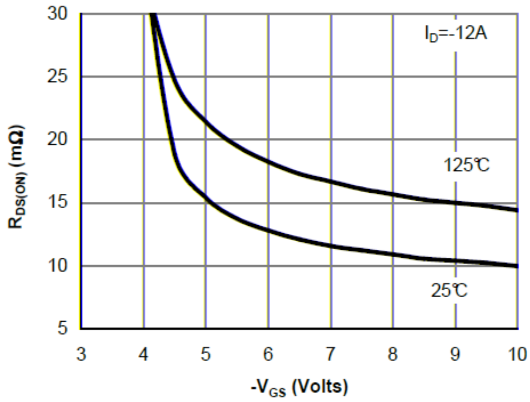


Figure 5: On-Resistance vs. Gate-Source Voltage

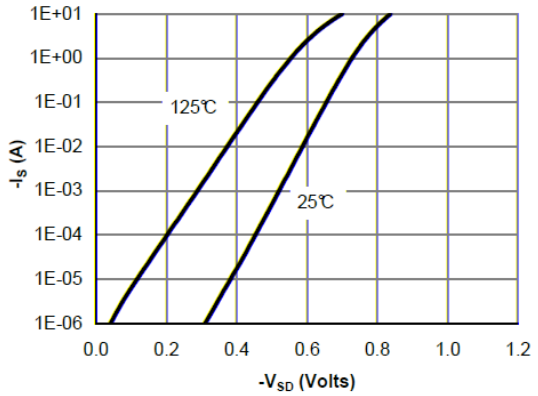


Figure 6: Body-Diode Characteristics

TYPICAL CHARACTERICTICS

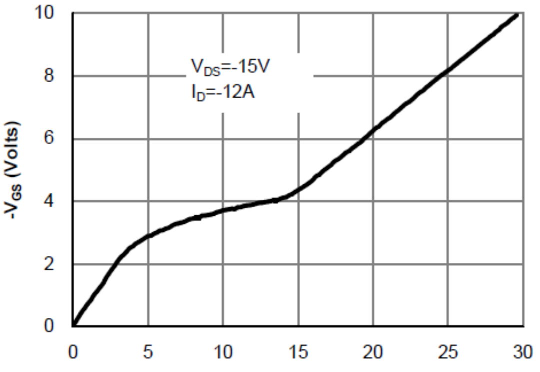
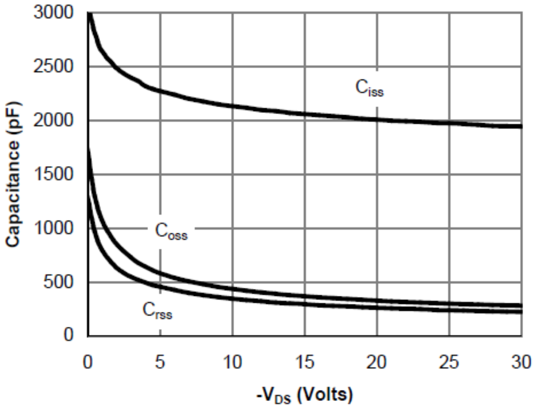
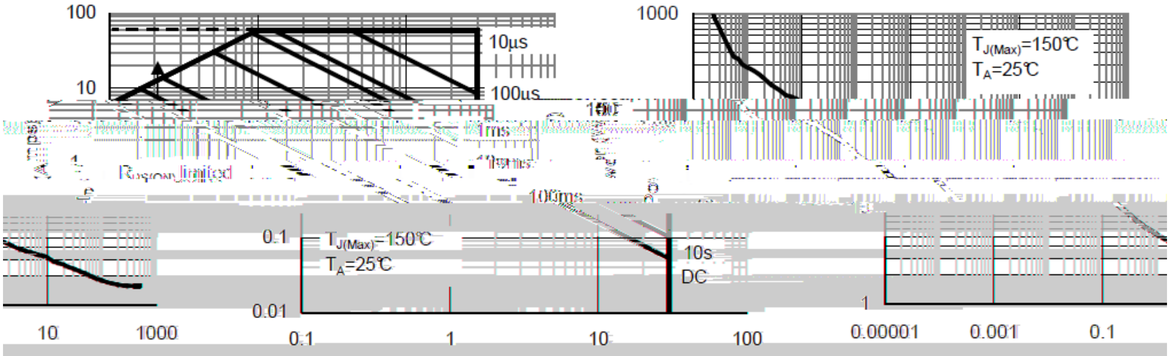


Figure 7: Gate-Charge Characteristics





)
Rating Junction-
E)

Figure 8: Capacitance Characteristics

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

Figure 10: Single Pulse Power
to-Ambient (Note

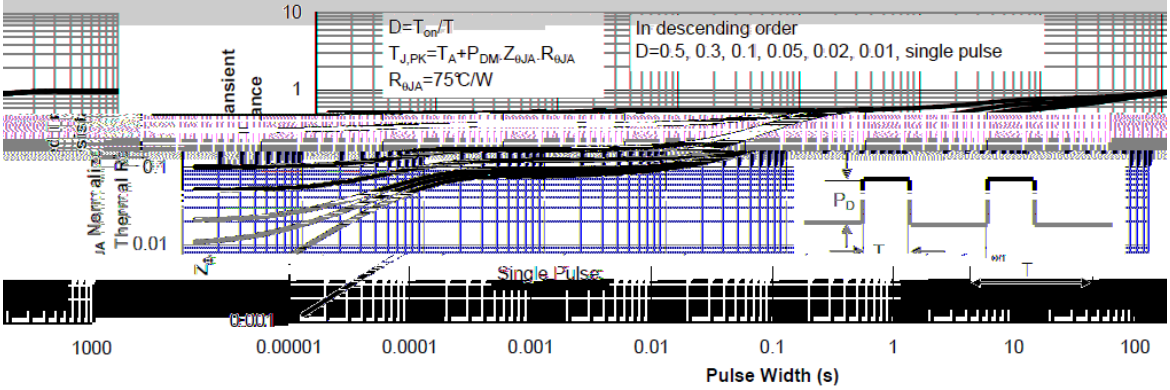
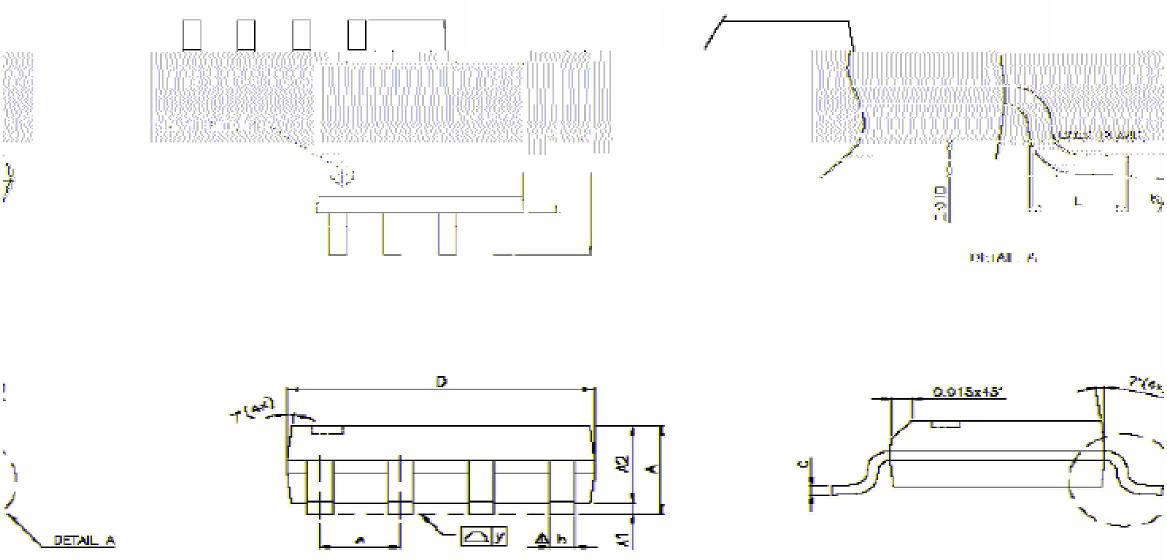


Figure 11: Normalized Maximum Transient Thermal Impedance(Note E)

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	0.10	—	0.25	0.004	—	0.010
A2	—	1.45	—	—	0.057	—
b	0.33	0.41	0.51	0.013	0.016	0.020
C	0.19	0.20	0.25	0.0075	0.008	0.0098
D	4.80	4.85	4.95	0.189	0.191	0.195
E	5.80	6.00	6.20	0.228	0.236	0.244
E1	3.80	3.90	4.00	0.150	0.154	0.157
e	—	1.27	—	—	0.050	—
L	0.38	0.71	1.27	0.015	0.028	0.050
⚠ y	—	—	0.076	—	—	0.003
θ	0°	—	8°	0°	—	8°