

主要特性/Features

$V_{BR(DSS)}$	$R_{DS(ON)} \text{ MAX}$	I_D
-20V	41 mΩ@-4.5V	-4.0A
	53 mΩ@-2.5V	

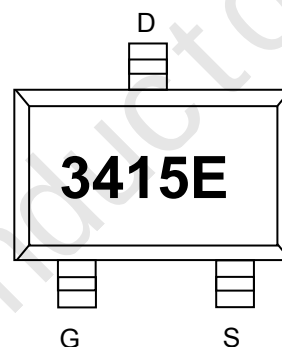
应用/Application

PWM应用 PWM applications

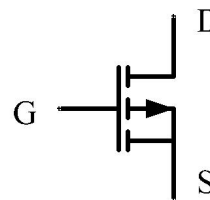
负载开关 Load Switch

电源管理 Power Management

印字/MARKING



等效电路/Equivalent Circuit



极限参数/Absolute Maximum Ratings(TA=25°C unless otherwise noted)

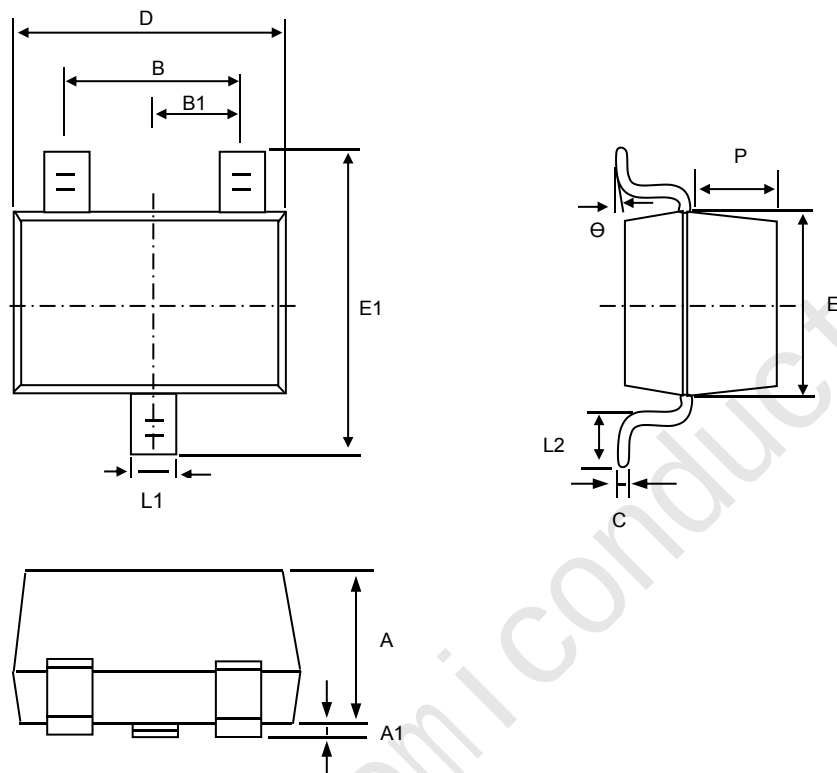
参数Parameter	符号Symbol	数值Value	单位Unit
Drain-Source Voltage	V_{DS}	-20	V
Gate-Source Voltage	V_{GS}	±8	V
Continuous Drain Current	I_D	-4.0	A
Pulsed Drain Current (note1)	I_{DM}	-30	A
Power Dissipation	$P_D (T_a=25^\circ\text{C})$	0.35	W
Thermal Resistance Junction to Ambient(note2)	$R_{\theta JA}$	357	°C/mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C

电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
静态参数/Static Characteristics						
Drain-Source Breakdown Voltage	$V_{BR(DSS)}$	$V_{GS}=0V, I_D=-250\mu A$	-20			V
Gate Threshold Voltage	$V_{GS(th)}$	$I_D=-250\mu A, V_{GS}=V_{DS}$	-0.3		-0.9	V
Gate-body leakage current	I_{GSS}	$V_{GS}=\pm 8V, V_{DS}=0V$			± 100	nA
Zero gate voltage drain current	I_{DSS}	$V_{DS}=-18V, V_{GS}=0V$			-1	μA
Drain-source on-resistance(note1)	$R_{DS(ON)}$	$V_{GS}=-4.5V, I_D=-4.0A$			41	m Ω
		$V_{GS}=-2.5V, I_D=-4.0A$			53	
Forward tranconductance(note1)	g_{FS}	$D_{GS}=-5V, I_D=-4A$	5			S
Drain-Source Diode Forward Voltage(note1)	V_{SD}	$V_{GS}=0V, I_{SD}=-1A$		0.7		V
动态参数/Dynamic Characteristics(note2)						
Input Capacitance	C_{iss}	$V_{DS}=-10V, V_{GS}=0V, f=1MHz$		750		pF
Output Capacitance	C_{oss}			110		
Reverse Transfer Capacitance	C_{rss}			80		
开关参数/Switching Characteristics(note2)						
Turn-on delay t ime	$t_{d(on)}$	$V_{DD}=-10V, R_G=35\Omega, V_{GEN}=-4.5V, R_L=2.55\Omega,$		15.6		ns
Turn-on rise time	t_r			11.2		ns
Turn-off delay time	$t_{d(off)}$			23.1		ns
Turn-off fall time	t_f			32.7		ns

注：① 脉冲测试脉冲宽度 $\leq 300\mu S$, 占空比 $\leq 2\%$ ；

② 这些参数未通过验证；

成品外观尺寸/SOT-23 Package Information


Symbol	Dim in mm		
	Min	Nor	Max
A	0.900	1.000	1.100
A1	0.000	0.050	0.100
L1	0.350	0.400	0.500
C	0.100	0.110	0.120
D	2.800	2.900	3.000
E	1.250	1.300	1.350
E1	2.250	2.400	2.550
B	1.800	1.900	2.000
B1	0.950TPY.		
L2	0.200	0.350	0.450
P	0.550	0.575	0.600