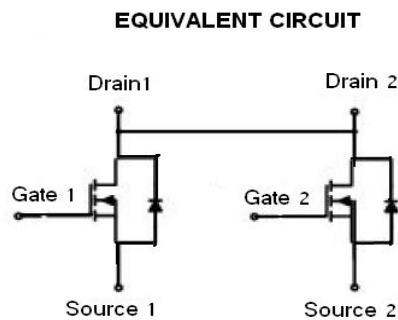
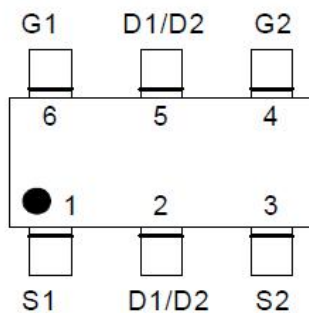




GENERAL DESCRIPTION

The RZC8809S is a dual N-channel MOS Field Effect Transistor which uses advanced trench technology to provide excellent $R_{DS(on)}$, low gate charge and operation with low gate voltages. This device is suitable for use as a load switch.

PIN CONFIGURATION



FEATURES

- $V_{DS(max)} = 19V$;
- $I_{D(max)} = 6.0A$;
- Low on-state resistance
 $R_{DS(on)} = 12.5m\Omega$ TYP. ($V_{GS} = 4.5V$)
 $R_{DS(on)} = 16m\Omega$ TYP. ($V_{GS} = 2.5V$)
- Lead free product is acquired;
- Surface Mount Package;

APPLICATIONS

- Battery protection.
- Battery Powered Systems.
- Power Management in Notebook Computer
- Portable Equipment

ORDERING INFORMATION

Part Number	Package	Top Marking	Packing
RZC8809S	SOT23-6	8809S	3000PCS/Real

**MAXIMUM RATINGS** ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Units	
Drain to Source Voltage	V_{DSS}	19	V	
Gate to Source Voltage	V_{GSS}	± 10	V	
Continuous Drain Current	25°C	ID	6.0	A
	85°C		4.8	A
Pulsed Drain Current	ID(pulse)	24	A	
Maximum Power Dissipation	25°C	PD	1.0	W
Operating Junction Temperature	T_J	+150	$^\circ\text{C}$	
Storage Temperature	TSTG	-55--+150	$^\circ\text{C}$	
Lead Temperature for Soldering Purposes (1/8" from case for 10 s)	T_L	260	$^\circ\text{C}$	

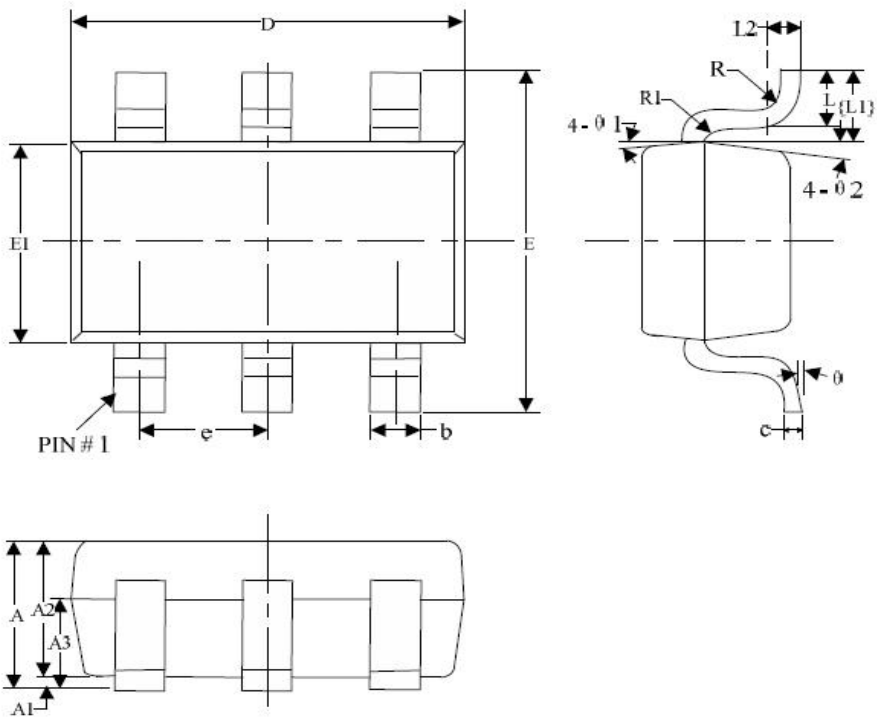
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	MIN	TYP	MAX	Unit
Drain-Source Breakdown Voltage	B_{VDSS}	$V_{GS}=0V, I_{DS}=250\mu A$	19			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=19V, V_{GS}=0V$			1	μA
Gate Leakage Current	I_{GSS}	$V_{GS}=\pm 10V, V_{DS}=0V$			± 100	nA
Gate threshold voltage	$V_{GS(TH)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	0.55	0.65	1.1	V
Drain to Source On-state Resistance	$R_{DS(ON)}$	$V_{GS}=4.5V, I_D=3.0A$		12.5	15	m Ω
		$V_{GS}=3.6V, I_D=3.0A$		13.5	16	
		$V_{GS}=2.5V, I_D=3.0A$		16	19	
Drain-Source Diode Forward Voltage	V_{SD}	$I_S=2.8A, V_{GS}=0V$		0.7	1.3	V



PACKAGE DIMENSIONS

SOT23-6



Dimensions (unit: mm)

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	-	-	1.30	e	0.85	0.95	1.05
A1	0	-	0.15	L	0.35	0.45	0.60
A2	0.90	1.10	1.30	L1	0.59REF		
A3	0.60	0.65	0.70	L2	0.25BSC		
b	0.39	-	0.49	R	0.05	-	-
c	0.12	-	0.19	R1	0.05	-	0.02
D	2.85	2.95	3.15	θ	0°	-	8°
E	2.60	2.80	3.00	$\theta 1$	3°	5°	7°
E1	1.55	1.65	1.75	$\theta 2$	6°	8°	10°