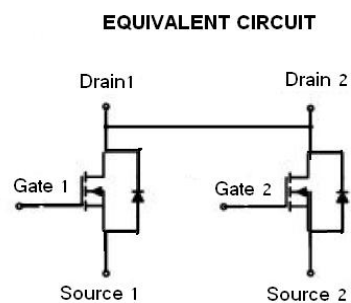
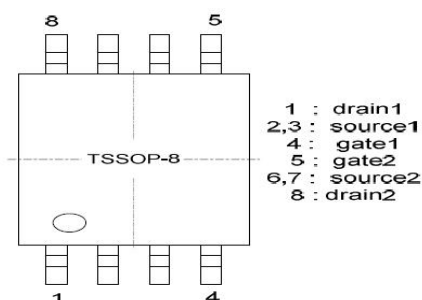




GENERAL DESCRIPTION

The RZC8205A 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

- $V_{DS(max)} = 20V$;
- $I_{D(max)} = 7.0A$;
- Low on-state resistance
 $R_{DS(on)} = 22m\Omega$ TYP. ($V_{GS} = 4.5V$)
 $R_{DS(on)} = 30m\Omega$ 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
RZC8205A	TSSOP-8	8205A

**MAXIMUM RATINGS** (Ta = 25°C)

Parameter	Symbol	Value	Units	
Drain to Source Voltage	VDSS	20	V	
Gate to Source Voltage	VGSS	±10	V	
Continuous Drain Current	25°C	ID	7.0	A
	85°C		5.6	A
Pulsed Drain Current	ID(pulse)	30	A	
Maximum Power Dissipation	25°C	PD	1.25	W
Operating Junction Temperature	TJ	+150	°C	
Storage Temperature	TSTG	-55--+150	°C	
Lead Temperature for Soldering Purposes (1/8" from case for 10 s)	TL	260	°C	

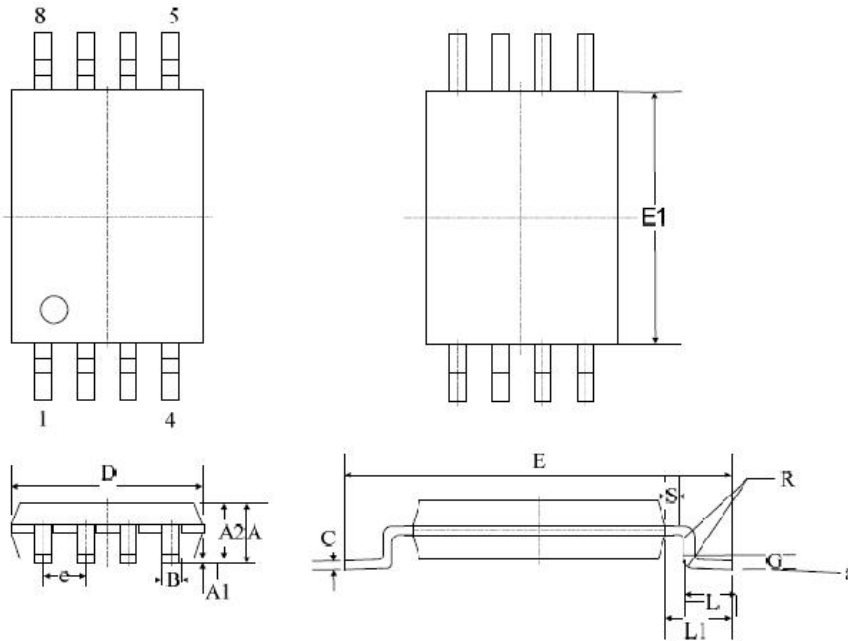
ELECTRICAL CHARACTERISTICS (TA = 25°C)

Parameter	Symbol	Test Conditions	MIN	TYP	MAX	Units
Drain-Source Breakdown Voltage	BVDSS	VGS=0V, ID=250uA	20			V
Zero Gate Voltage Drain Current	IDSS	VDS=16V, VGS=0V			100	nA
Gate Leakage Current	IGSS	VGS=±10V, VDS=0V			±100	nA
Gate threshold voltage	VGS(TH)	VDS=VGS, ID= 250μA	0.5	0.7	1.0	V
Drain to Source On-state Resistance	RDS(on)	VGS= 4.5V, ID=7.0A		22	25	mΩ
		VGS= 2.5V, ID=6.0A		27	35	mΩ
Input Capacitance	Ciss	VGS =0V, VDS =10V, f=1.0MHZ		630		pF
Output Capacitance	Coss			164		pF
Reverse Transfer Capacitance	Crss			137		pF
Turn-on Delay Time	td(on)	VDD =10V, ID =7.0A, VGS =10V, RG =3Ω RL =1.5Ω		4.5		nS
Rise Time	tr			14		nS
Turn-off Delay Time	td(off)			29		nS
Fall Time	tf			8		nS
Total Gate Charge	QG	VDD =10V, ID =7.0A, VGS=10V,		11.5		nC
Gate to Source Charge	QGS			1.2		nC
Gate to Drain Charge	QGD			3.5		nC
Drain-Source Diode Forward Voltage	VSD	IS=1.0A, VGS=0V		0.7	1.0	V



PACKAGE DIMENSIONS

TSSOP-8



Dimensions (unit: mm)

DIM		A	A(1)	A(2)	B	C	D	E	E1	e	G	L	L1	a	R	S	
MM	Min.	1.05	0.05	0.99	0.19		2.9	6.2	4.3	0.65 BSC	0.254 GAGE PLANE	0.45	0.9	0°	0.09	0.2	
	Nom.	1.1	0.1	1.02	0.25	0.127	3	6.4	4.4			0.6	1	4°			
	Max.	1.2	0.15	1.05	0.3		3.2	6.6	4.5			0.75	1.1	8°			