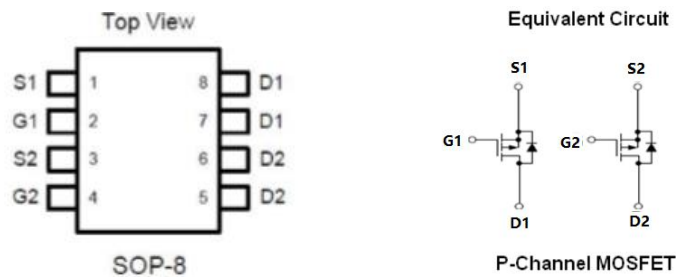




GENERAL DESCRIPTION

The RZC4807 uses advanced trench technology to provide excellent $R_{DS(ON)}$. This device is suitable for use as a load switch or in PWM applications. Standard product RZC4807 is Pb-free (meets ROHS specifications). RZC4807 is a Green Product ordering option.

PIN CONFIGURATION



FEATURES

- $V_{DS(max)} = -30V$;
- $I_{D(max)} = -6A$
- Low on-state resistance
 $R_{DS(on)} \leq 30m\Omega$ MAX. ($V_{GS} = -10V$)
 $R_{DS(on)} \leq 55m\Omega$ MAX. ($V_{GS} = -4.5V$)
- Super High Dense Cell Design
- Reliable and Rugged
- Lead Free and Green Devices Available (RoHS Compliant)

APPLICATIONS

- High Side Load Switch
- Power Management in LCD TV, Monitor, Notebook Computer, Portable Equipment and Battery Powered Systems

ORDERING INFORMATION

Part Number	Package	Top Marking	Packing
RZC4807	SOP-8	S4807	3000PCS/Real

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

Parameter	Symbol	Value		Units	
		N1	N2		
Drain to Source Voltage	V_{DSS}	-30	-30	V	
Gate to Source Voltage	V_{GSS}	± 20	± 20	V	
Continuous Drain Current	I_D	25 $^\circ\text{C}$	-6	-6	A
		85 $^\circ\text{C}$	-4.8	-4.8	A
Pulsed Drain Current	$I_{D(pulse)}$	-24	-24	A	
Maximum Power Dissipation	$P_D(25^\circ\text{C})$	1.5		W	
Operating Junction Temperature	T_J	+150		$^\circ\text{C}$	
Storage Temperature	T_{STG}	-55-+150		$^\circ\text{C}$	
Lead Temperature for Soldering Purposes(1/8" from case for 10 s)	T_L	260		$^\circ\text{C}$	

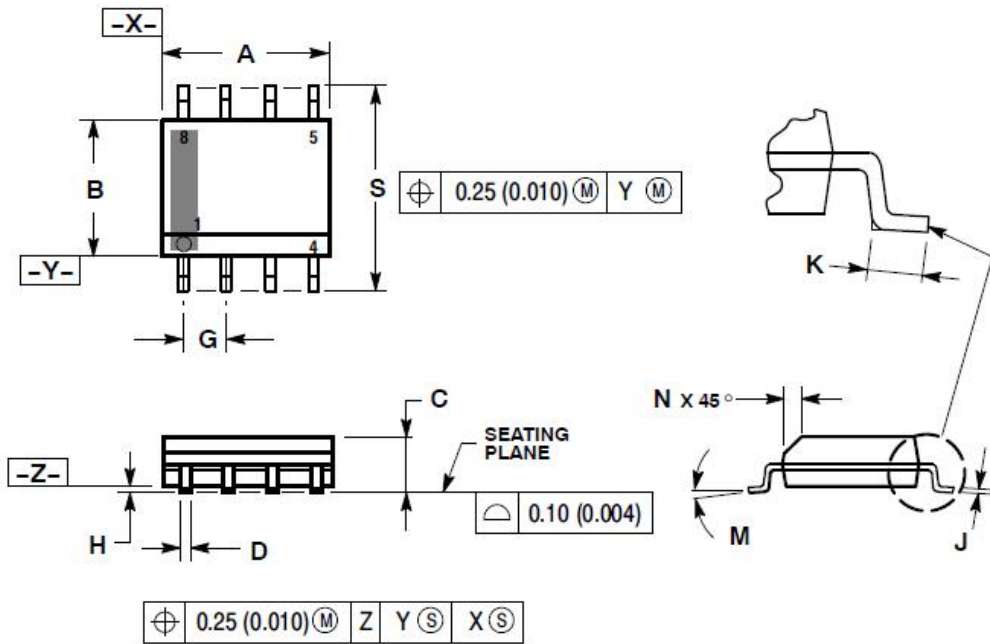
**ELECTRICAL CHARACTERISTICS**($T_A = 25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	MIN	TYP	MAX	Units
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_{DS}=-250\mu A$	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-30V, V_{GS}=0V$			-1	μA
Gate Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V$			± 100	nA
Gate threshold voltage	$V_{GS(TH)}$	$V_{DS}=V_{GS}, I_D=-250\mu A$	-1.0	-2.0	-2.5	V
Drain to Source On-state Resistance	$R_{DS(on)}$	$V_{GS}=-10V, I_D=-3.0A$		26	30	$m\Omega$
		$V_{GS}=-4.5V, I_D=-3.0A$		52	55	$m\Omega$
Drain-Source Diode Forward Voltage	V_{SD}	$I_S=1A, V_{GS}=0V$		0.8	1.3	V
Input Capacitance	C_{ISS}	$V_{DS}=-20V, V_{GS}=0V, f=1MHz$		922		pF
Output Capacitance	C_{OSS}			150		pF
Reverse Transfer Capacitance	C_{RSS}			122		pF
Total Gate Charge	Q_g	$V_{DS}=-20V, V_{GS}=-10V, I_D=-5A$		9.6		nC
Gate-Source Charge	Q_{gs}			2.2		nC
Gate-Drain Charge	Q_{gd}			3.3		nC

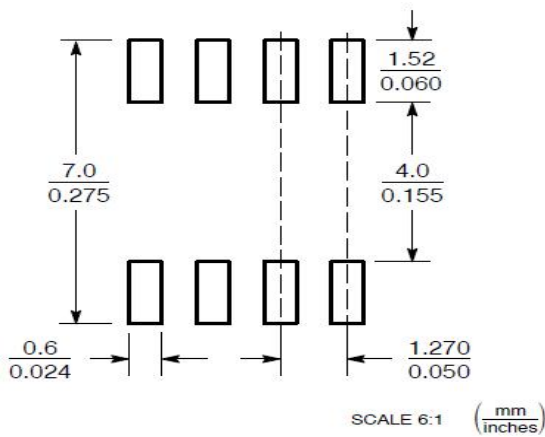


PACKAGE DIMENSIONS

SOP-8



SOLDERING FOOTPRINT*



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.80	5.00	0.189	0.197
B	3.80	4.00	0.150	0.157
C	1.35	1.75	0.053	0.069
D	0.33	0.51	0.013	0.020
G	1.27 BSC		0.050 BSC	
H	0.10	0.25	0.004	0.010
J	0.19	0.25	0.007	0.010
K	0.40	1.27	0.016	0.050
M	0°	8°	0°	8°
N	0.25	0.50	0.010	0.020
S	5.80	6.20	0.228	0.244