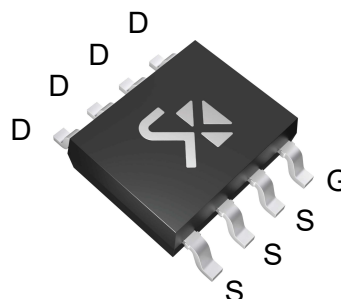


POWER MOSFET WAFER DATASHEET

Feature

- 40V P-Channel MOSFET
- Ultra low On-Resistance
- $R_{DS(ON)} = 10m\Omega(\text{typ.}) @ V_{GS} = -10V$
- $R_{DS(ON)} = 14m\Omega(\text{typ.}) @ V_{GS} = -4.5V$
- Reliable and Rugged

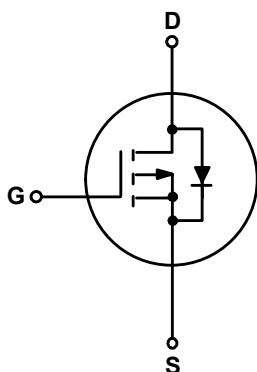


SOP-8 Pin Configuration

Applications

- Power Management in Notebook Computer ,
Portable Equipment and Battery Powered Systems

Graphic Symbol



1. Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ Unless Otherwise Noted)

Symbol	Parameter	Rating	Unit
V_{DSS}	Drain-Source Voltage	-40	V
V_{GSS}	Gate-Source Voltage	± 20	
I_D	Continue Drain Current	-50	A
I_{DM}^a	Pulsed Drain Current	-102	
T_J	Maximum Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55 to 150	
$R_{\theta JC}$	Thermal Resistance-Junction to Case (TO-252)	2.1	$^\circ\text{C/W}$

2. Static Electrical Characteristics (T_A=25°C Unless Otherwise Noted)

Symbol	Parameter	Test Condition	SK50P04			Unit
			Min.	Typ.	Max.	
Static Characteristics ^b						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V, I _{DS} =-250μA	-40	-	-	V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =-32V, V _{GS} =0V	-	-	-1	μA
		T _J =85°C	-	-	-30	
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} , I _{DS} =-250μA	-1	-1.4	-2	V
I _{GSS}	Gate Leakage Current	V _{GS} =±20V, V _{DS} =0V	-	-	±100	nA
R _{DS(ON)}	Drain-Source On-state Resistance	V _{GS} =-10V, I _{DS} =-1A	-	10	15	mΩ
		V _{GS} =-4.5V, I _{DS} =-1A	-	14	20	
V _{SD}	Diode Forward Voltage	I _{SD} =-1A, V _{GS} =0V	-	-0.7	-1.1	V

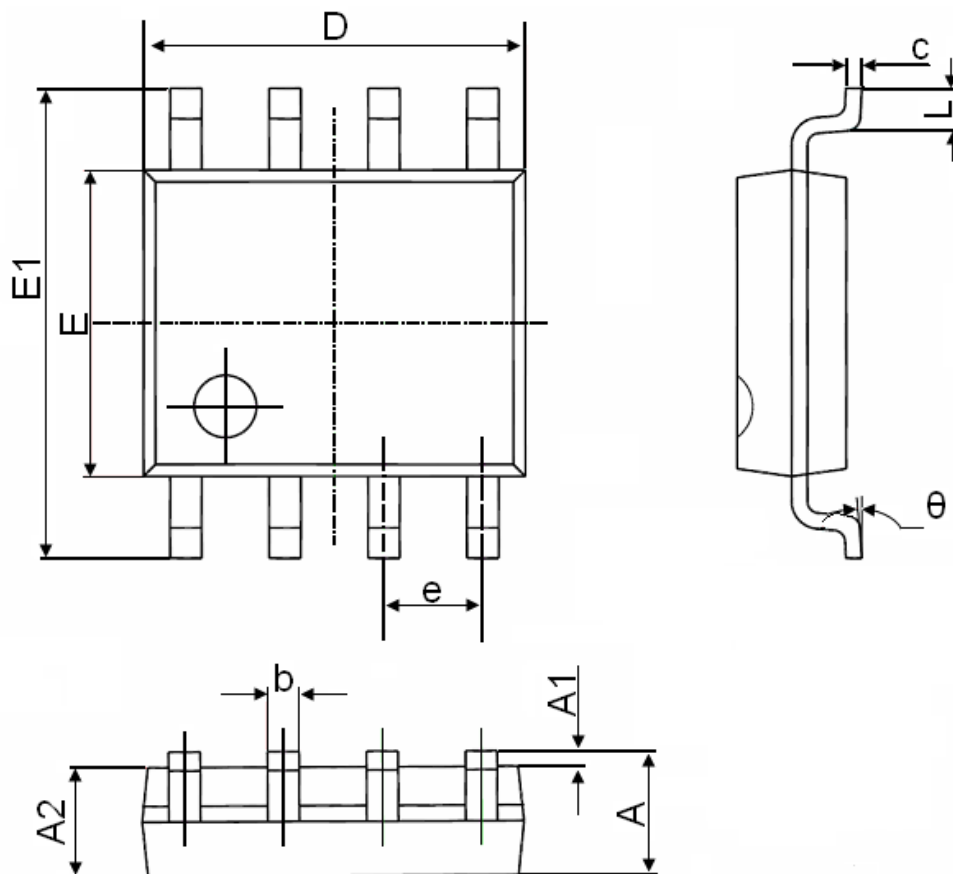
*Note:

a : Current maybe limit by bonding wire

b : MOS static characteristics test by wafer level(CP)

PACKAGE OUTLINE

SOP-8



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.006	0.010
D	4.700	5.100	0.185	0.200
E	3.800	4.000	0.150	0.157
E1	5.800	6.200	0.228	0.244
e	1.270(BSC)		0.050(BSC)	
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°