

Isc P-Channel MOSFET Transistor

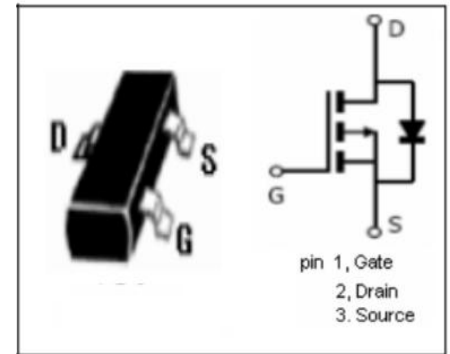
IRLML6302

• FEATURES

- With SOT-23 package
- Low input capacitance and gate charge
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

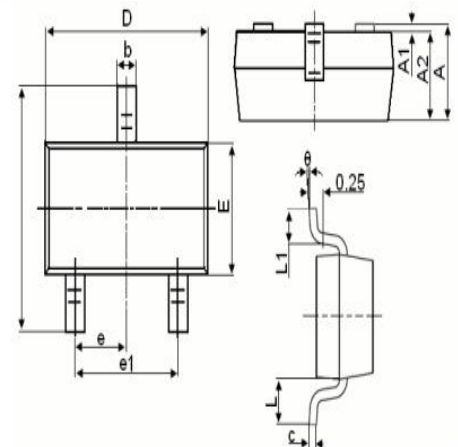
• APPLICATIONS

- Switching applications



• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	-20	V
V _{GSS}	Gate-Source Voltage	± 12	V
I _D	Drain Current-Continuous T _c =25°C T _c =70°C	-0.78 -0.26	A
I _{DM}	Drain Current-Single Pulsed	-4.9	A
P _D	Total Dissipation @T _c =25°C	540	mW
T _{ch}	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C



Symbol	Dimensions in Millimeters	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
theta	0°	8°

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-a)	Channel-to-ambient thermal resistance	230	°C/W

Isc P-Channel MOSFET Transistor**IRLML6302****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=-0.25mA$	-20			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=-0.25mA$	-0.7		-1.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}= -4.5V; I_D=-0.61A$			600	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}= \pm 12V; V_{DS}=0V$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=-16V; V_{GS}= 0V; T_j=25^{\circ}\text{C}$ $V_{DS}=-16V; V_{GS}= 0V; T_j=150^{\circ}\text{C}$			-1 -25	μA
V_{SDF}	Diode forward voltage	$I_{SD}=-0.61A, V_{GS}= 0V$			-1.2	V