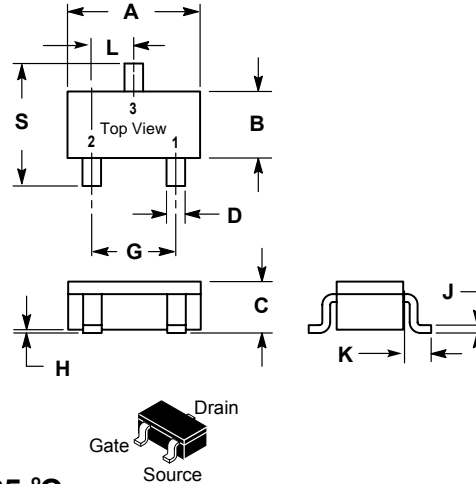
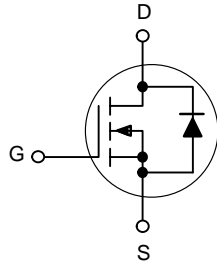


RoHS Compliant Product

## Description

The SMG702 is universally used for all commercial industrial surface mount application.

Marking : 702<sup>-</sup>



SC-59		
Dim	Min	Max
A	2.70	3.10
B	1.40	1.60
C	1.00	1.30
D	0.35	0.50
G	1.70	2.10
H	0.00	0.10
J	0.10	0.26
K	0.20	0.60
L	0.85	1.15
S	2.40	2.80
All Dimension in mm		

## Absolute Maximum Ratings at $T_A = 25^\circ\text{C}$

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	$V_{DS}$	60	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
- Continuous	$V_{GSM}$	$\pm 40$	V
- Non-repetitive ( $t_p \leq 50\mu\text{s}$ )			
Continuous Drain Current	$I_D$	500	mA
Pulsed Drain Current (Pulse width $\leq 300\mu\text{s}$ , duty cycle $\leq 2\%$ )	$I_{DM}$	800	mA
Total Power Dissipation	$P_D$	225	mW
Thermal Resistance, Junction-to-Ambient	$R_{thJA}$	556	$W/^\circ\text{C}$
Operating Junction and Storage Temperature Range	$T_J, T_{stg}$	$-55 \sim +150$	$^\circ\text{C}$

## Electrical Characteristics ( $T_J = 25^\circ\text{C}$ Unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Drain-Source Breakdown Voltage	$BV_{DSS}$	60	-	-	V	$V_{GS}=0V, I_D=250\mu\text{A}$
Gate Threshold Voltage	$V_{GS(th)}$	1	-	2.5	V	$V_{DS}=2.5V, I_D=0.25\text{mA}$
Gate-Source Leakage Current	$I_{GSS}$	-	-	$\pm 100$	nA	$V_{GS}=\pm 20V, V_{DS}=0$
Zero Gate Voltage Drain Current	$I_{DSS}$	-	-	1	$\mu\text{A}$	$V_{DS}=60V, V_{GS}=0$
On-State Drain Current	$I_{D(ON)}$	500	-	-	mA	$V_{DS}=7.5V, V_{GS}=10V$
Static Drain-Source On-Resistance	$R_{DS(ON)}$	-	-	5	$\Omega$	$I_D=50\text{mA}, V_{GS}=5V$
		-	-	4.5		$I_D=500\text{mA}, V_{GS}=10V$
Input Capacitance	$C_{iss}$	-	-	50	pF	$V_{GS}=0V$ $V_{DS}=25V$ $f=1.0\text{MHz}$
Output Capacitance	$C_{oss}$	-	-	25		
Reverse Transfer Capacitance	$C_{rss}$	-	-	5		
Forward Transconductance	$G_{fs}$	80	-	-	mS	$V_{DS} > 2 V_{DS(ON)}, I_D=200\text{mA}$

## Characteristics Curve

