

RoHS Compliant Product
A Suffix of "-C" specifies halogen & lead-free

DESCRIPTION

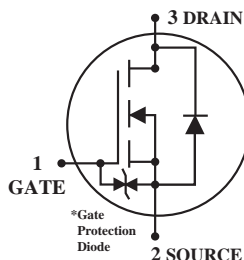
- Low on-resistance
- Fast switching speed
- Easily designed drive circuits
- Easy to parallel

FEATURES

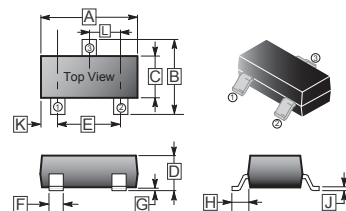
- Simple drive requirement
- Small package outline

MARKING

KN



SOT-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100	REF.
B	1.80	2.45	H	0.525	REF.
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650	TYP.
F	0.20	0.40			

MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Drain – Source Voltage	V _{DS}	30	V
Gate – Source Voltage	V _{GS}	±20	V
Continuous Drain Current	I _D	100	mA
Power Dissipation ¹	P _D	200	mW
Maximum Junction to Ambient	R _{θJA}	625	°C / W
Operating Junction & Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Off Characteristics						
Drain-Source Breakdown Voltage	V _{(BR)DSS}	30	-	-	V	V _{GS} =0, I _D =10μA
Gate-Threshold Voltage	V _{GS(TH)}	0.8	-	1.5	V	V _{DS} =3V, I _D =100μA
Gate-Source Leakage Current	I _{GSS}	-	-	±500	nA	V _{GS} =±20V, V _{DS} =0
Drain-Source Leakage Current	I _{DSS}	-	-	0.2	μA	V _{DS} =30V, V _{GS} =0
Static Drain-Source On-Resistance	R _{DS(ON)}	-	-	8	Ω	V _{GS} =4V, I _D =10mA
		-	-	13		V _{GS} =2.5V, I _D =1mA
Forward Transconductance	g _{FS}	20	-	-	ms	V _{DS} =3V, I _D =10mA
Dynamic Characteristics¹						
Input Capacitance	C _{ISS}	-	13	-	pF	V _{DS} =5V
Output Capacitance	C _{OSS}	-	9	-		V _{GS} =0
Reverse Transfer Capacitance	C _{RSS}	-	4	-		f=1MHz
Switching Characteristics¹						
Turn-on Delay Time	T _{d(ON)}	-	15	-	ns	V _{GS} =5V, V _{DD} =5V
Rise Time	T _R	-	35	-		I _D =10mA
Turn-off Delay Time	T _{d(OFF)}	-	80	-		R _L =500Ω
Fall Time	T _F	-	80	-		R _G =10Ω

Note:

1. These parameters have no way to verify.

CHARACTERISTIC CURVES

