

BR2SK3018WQ

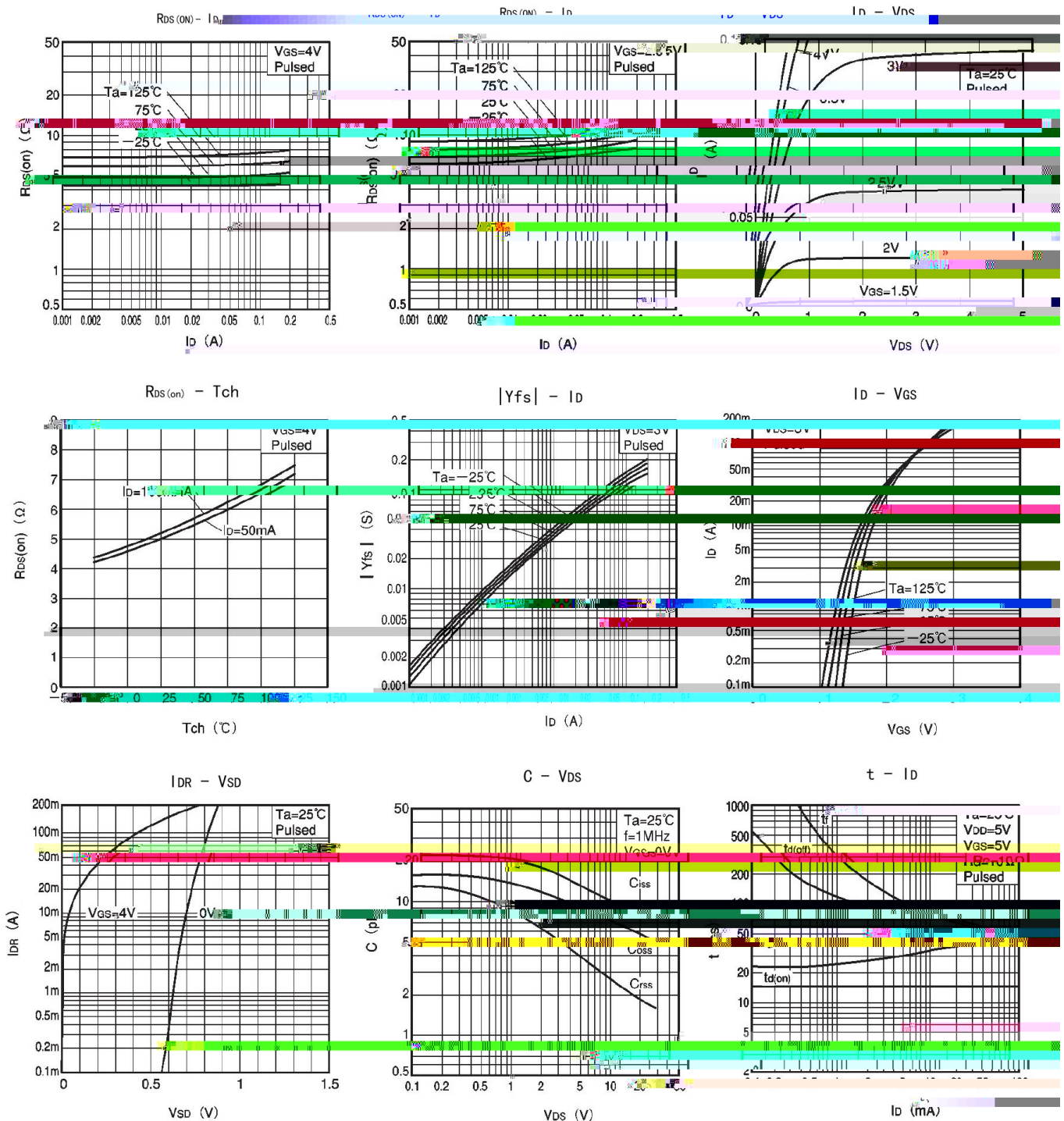
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current – Continuous	I_D	100	mA
Drain Current– Pulsed	I_{DP}^{*1}	200	mA
Reverse drain current–Continuous	I_{DR}	100	mA
Reverse drain current– Pulsed	I_{DRP}^{*1}	200	mA
Total power dissipation ($T_c=25^\circ\text{C}$)	P_D^{*2}	200	mW
Channel Temperature	T_{ch}	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

*1: $P_w \leq 10\mu\text{s}$, Duty cycle $\leq 50\%$

*2:With each pin mounted on the recommended lands

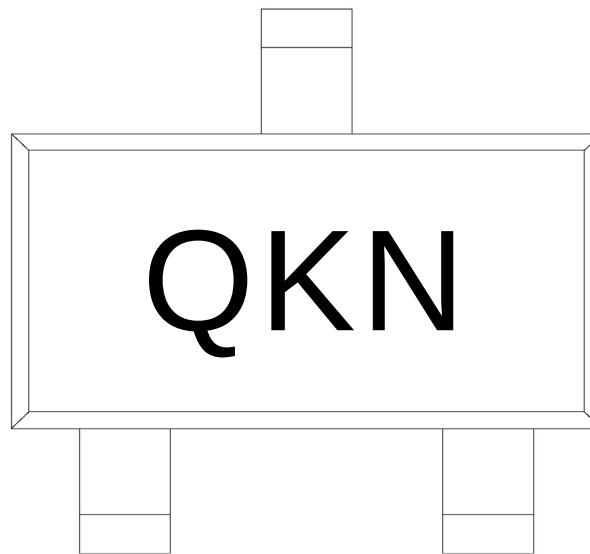
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	$V_{(BR)DS}$	$V_{GS}=0V$ $I_D=10\mu A$	30			V
Gate threshold voltage	$V_{GS(th)}$	$V_{DS}=3.0V$ $I_D=100\mu A$	0.8		1.5	V
Static Drain–Source On–Resistance	$R_{DS(on)1}$	$V_{GS}=4.0V$ $I_D=10mA$		5.0	8.0	Ω
	$R_{DS(on)2}$	$V_{GS}=2.5V$ $I_D=1.0mA$		7.0	13	Ω
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V$ $V_{GS}=0V$			1.0	μA
Gate–Body Leakage.	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 1	μA
Forward Transconductance	g_{FS}	$V_{DS}=3V$ I_D				

/ Electrical Characteristic Curve



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Rev.A Aug.-2022

/ Marking Instructions



Q

KN

Note:

Q: Automobile halogen-free product Code

KN: Package type

() / **Temperature Profile for IR Reflow Soldering(Pb-Free)**

Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 200 | 60 | 120sec; | 1.Preheating:150~200 , Time:60~120sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ **Resistance to Soldering Heat Test Conditions**

260 5 10 1 sec. Temp:260±5 Time:10±1 sec

/ **Packaging SPEC.**

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205