

Specification Tentative	Products MOSFET	Type 2SK1976
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1. TYPE. 2SK1976
2. DESCRIPTION. Silicon N-Channel MOS FET.
3. APPLICATION. Switching.
4. ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub> = 25°C)

Item	Symbol	Rating	Unit
Drain-Source Voltage	V <sub>DSS</sub>	450	V
Gate-Source Voltage	V <sub>GSS</sub>	±30	V
Drain Current	I <sub>D</sub>	5	A
Power Dissipation	P <sub>D</sub>	30	W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~150	°C

5. ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Gate-Source Leak Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±30V, V <sub>DS</sub> = 0V	-	-	±100	nA
Drain-Source Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = 1mA, V <sub>GS</sub> = 0V	450	-	-	V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 450V, V <sub>GS</sub> = 0V	-	-	100	μA
Gate Threshold Voltage	V <sub>GS(off)</sub>	I <sub>D</sub> = 1mA, V <sub>DS</sub> = 10V	2.0	-	4.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	I <sub>D</sub> = 2.5A, V <sub>DS</sub> = 10V	2.5	4.0	-	S
Static Drain-Source On-State Resistance	R <sub>DS(ON)</sub>	I <sub>D</sub> = 2.5A, V <sub>GS</sub> = 10V	-	1.1	1.8	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 10V	-	830	-	pF
Output Capacitance	C <sub>oss</sub>	V <sub>GS</sub> = 0V	-	140	-	pF
Reverse Transfer Capacitance	C <sub>rss</sub>	f = 1MHz	-	50	-	pF
Turn-On Delay Time	t <sub>d(on)</sub>	I <sub>D</sub> = 2.5A, V <sub>DD</sub> = 150V	-	10	-	ns
Rise Time	t <sub>r</sub>	R <sub>L</sub> = 60Ω	-	15	-	ns
Turn-Off Delay Time	t <sub>d(off)</sub>	V <sub>GS</sub> = 10V	-	50	-	ns
Fall Time	t <sub>f</sub>	R <sub>in</sub> = 10Ω	-	35	-	ns
Reverse Recovery Time	t <sub>rr</sub>	I <sub>SD</sub> = 5A, V <sub>GS</sub> = 0V	-	400	-	ns
Reverse Recovery Charge	Q <sub>rr</sub>	d <sub>i</sub> /d <sub>t</sub> = 100A/μs	-	2.0	-	μC

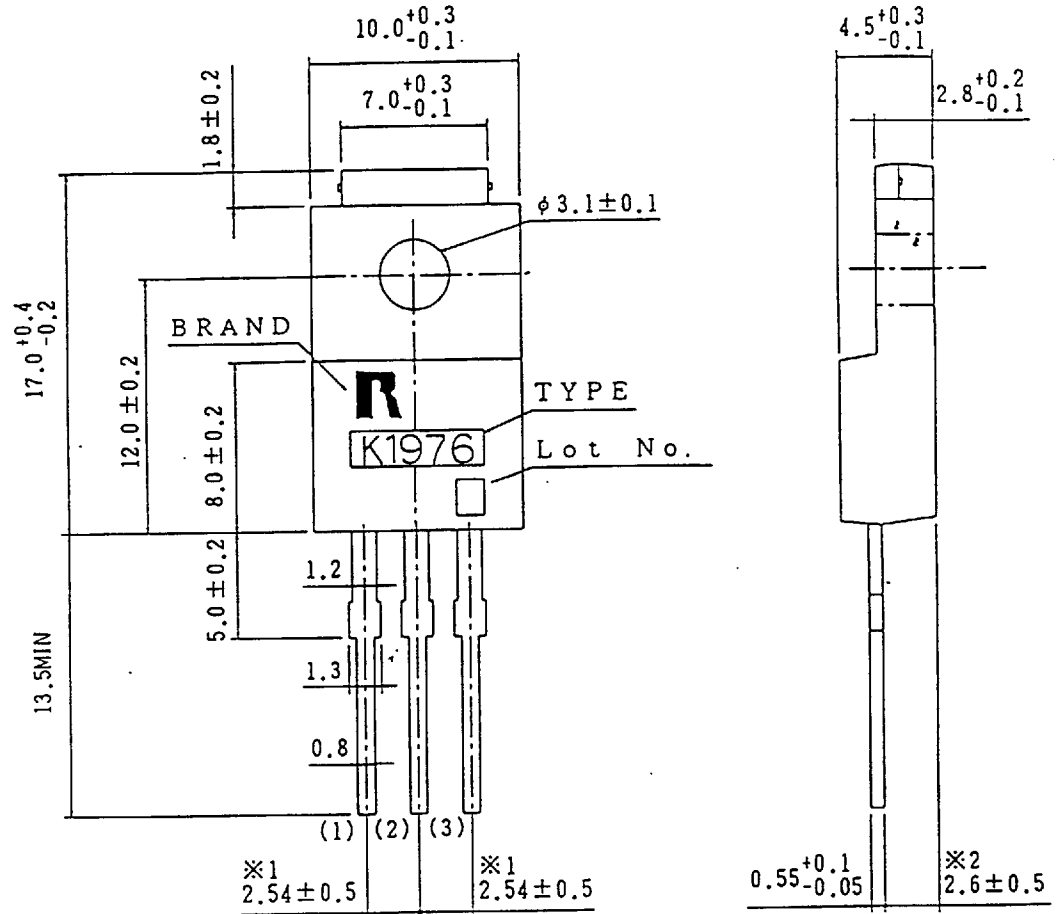
ROHM CO., LTD.

Design <i>T. Konishi</i>	Approval <i>T. Kito</i>	Specification No. TKK1976-3	Date Jul / 8 / 92
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Specification	Products	Type
	SC-210FP	2SK1976

figure 1.

FD:fig-8860



UNIT : mm

Note ※1 the neck of mold package is  $2.54 \pm 0.1$   
 ※2 the neck of mold package is  $2.6 \pm 0.1$

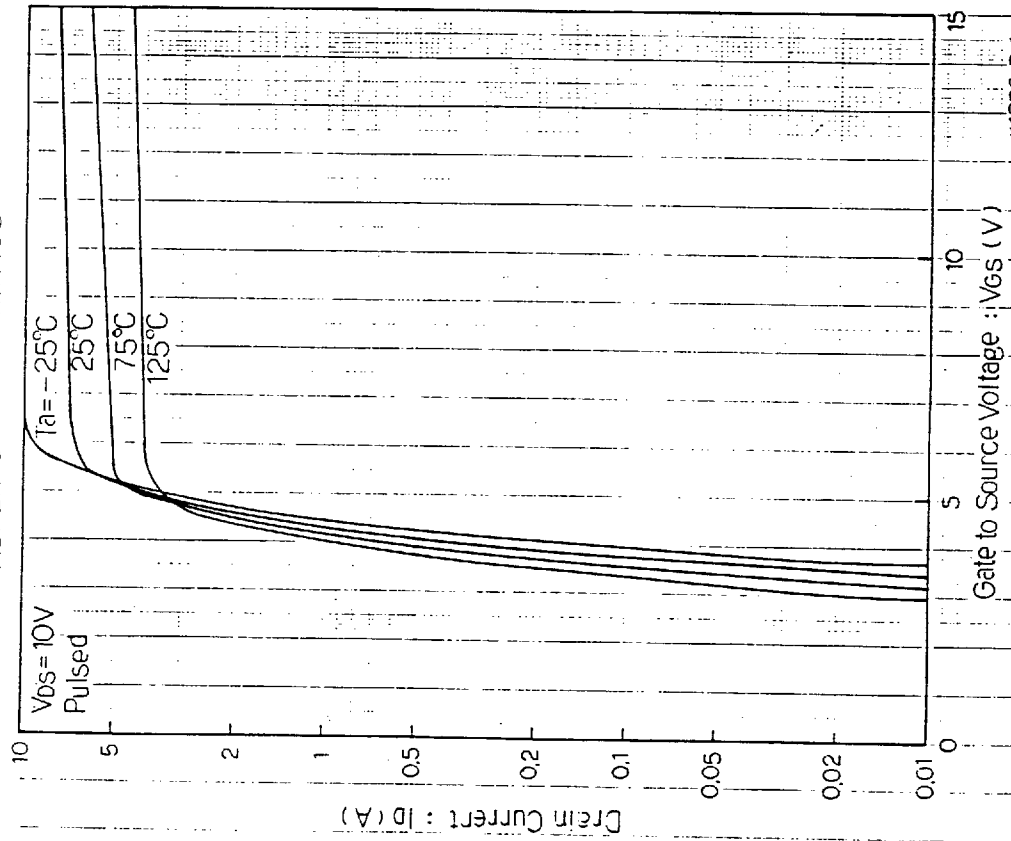
- (1) Gate
- (2) Drain
- (3) Source

A factory  
 APOLLO ELECTRONICS CO., LTD.  
 883 Kamikitajima, Chikugo, Fukuoka 833, Japan

The net weight  
 2.12 g/pce

2SK1976

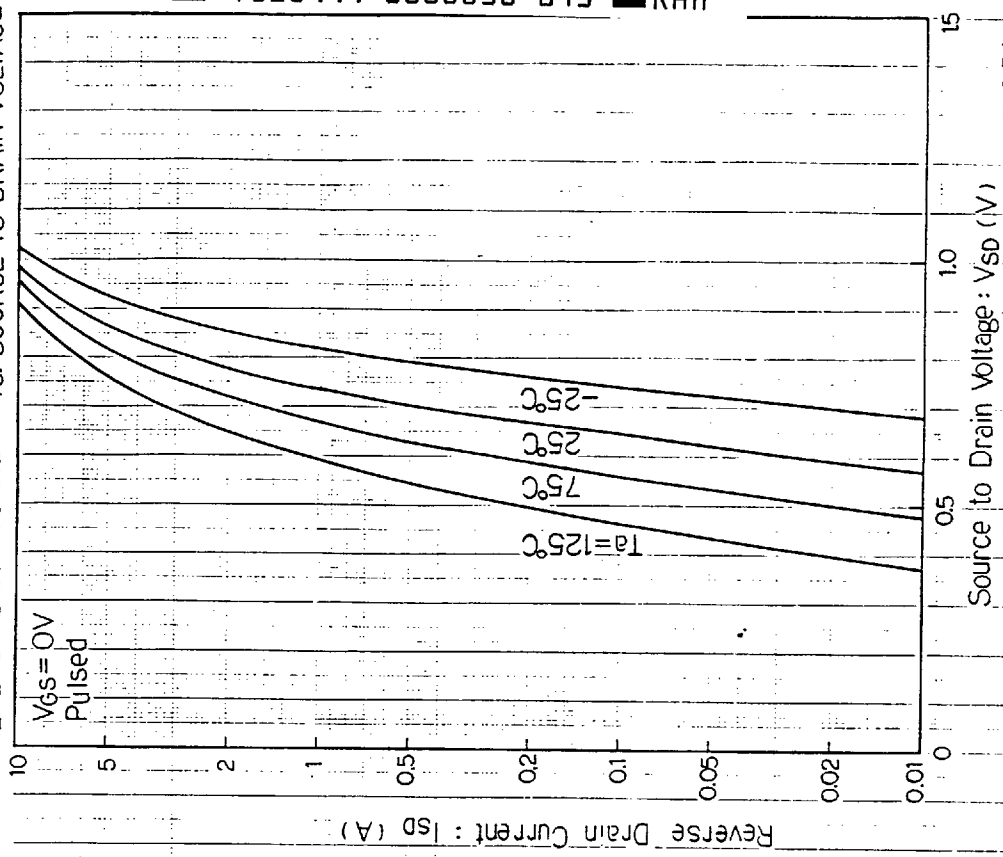
### TRANSFER CHARACTERISTICS



K1976-B-1

2SK1976

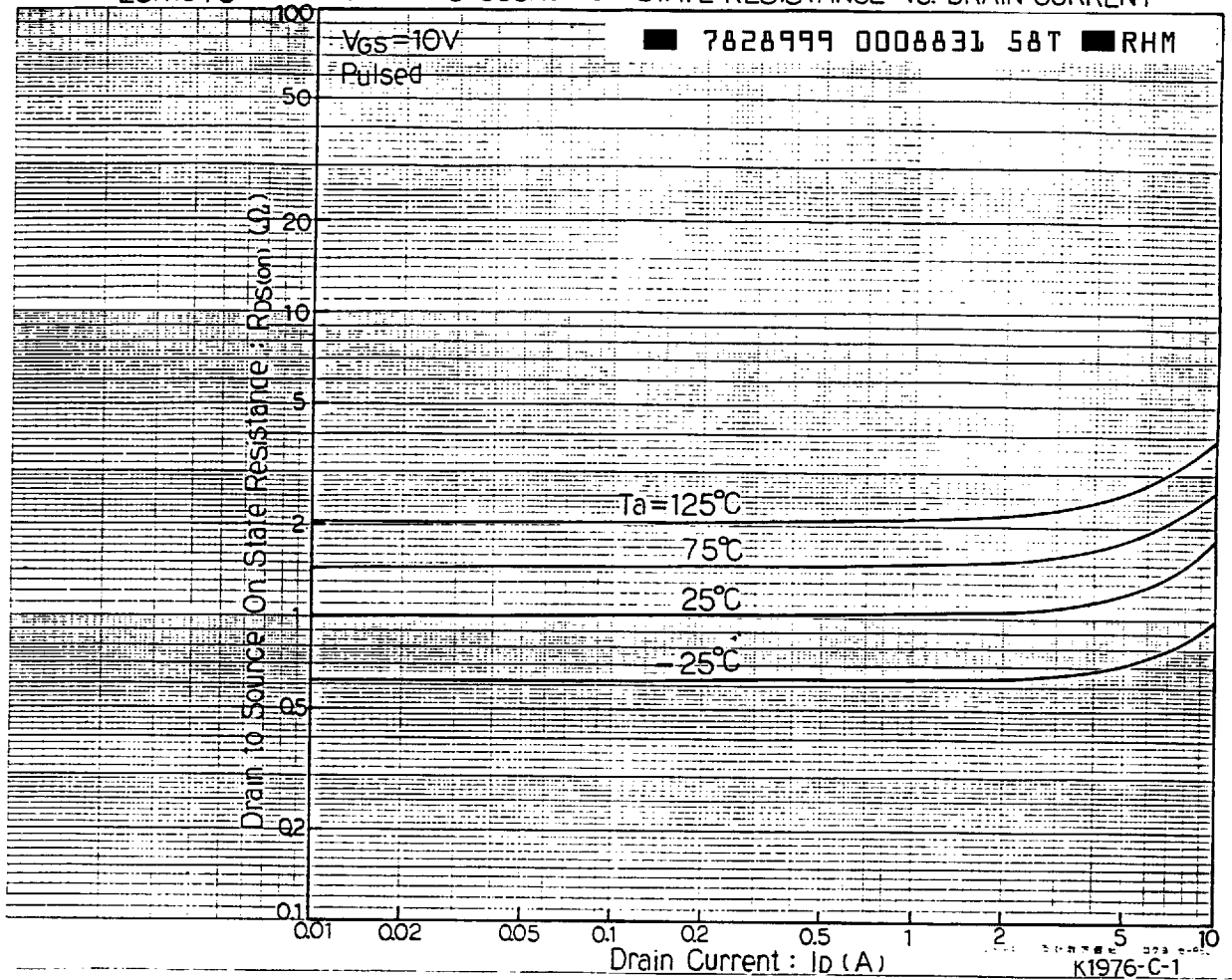
### REVERSE DRAIN CURRENT VS. SOURCE TO DRAIN VOLTAGE



K1976-E-1

2SK1976

### DRAIN TO SOURCE ON STATE RESISTANCE VS. DRAIN CURRENT



2SK1976

### FORWARD TRANSFER ADMITTANCE VS. DRAIN CURRENT

