	No.4755	2SK2219
		N-Channel Junction Silicon FET
Capacitor Microphone Applications		

Features

- Very small-sized package permitting 2SK2219-applied sets to be made small and slim.
- Especially suited for use in audio, telephone capacitor microphones.
- Excellent voltage characteristic.
- Excellent transient characteristic.
- Adoption of FBET process.

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

			unit
Gate-to-Drain Voltage	V_{GDO}	-20	V
Gate Current	I_G	10	mA
Drain Current	I_D	1	mA
Allowable Power Dissipation	P_D	100	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDO}$	$I_G = -100\mu\text{A}$	-20			V
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5\text{V}, I_D = 1\mu\text{A}$	-0.2	-0.6	-1.2	V
Drain Current	I_{DSS}	$V_{DS} = 5\text{V}, V_{GS} = 0$	140※		500※	μA
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{kHz}$	0.5	1.2		mS
Input Capacitance	C_{iss}	$V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$		4.1		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$		0.88		pF

※ : The 2SK2219 is classified by I_{DSS} as follows : (unit : μA)

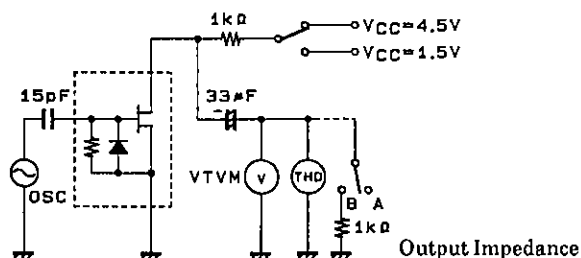
140	21	240	210	22	350	320	23	500
-----	----	-----	-----	----	-----	-----	----	-----

Marking : D

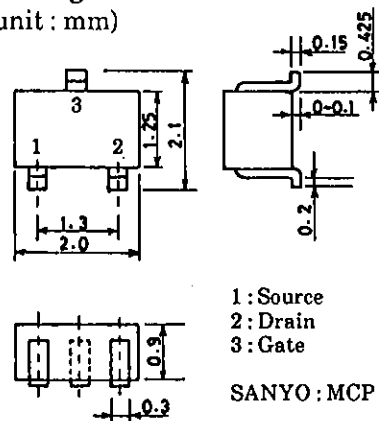
I_{DSS} rank : 21, 22, 23

Test Circuit

Voltage Gain
Frequency Characteristic
Distortion
Reduced Voltage Characteristic



Package Dimensions 2058A (unit : mm)



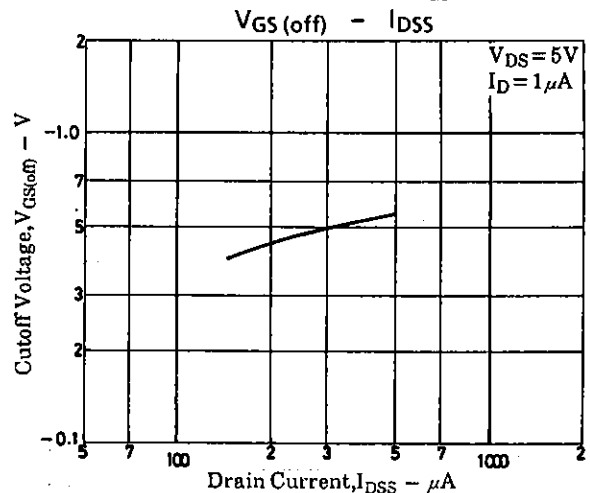
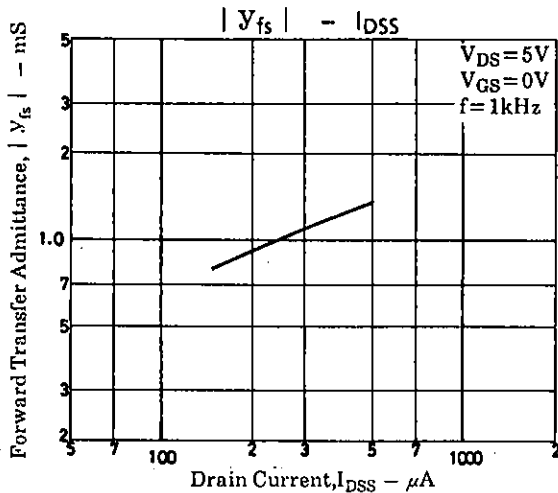
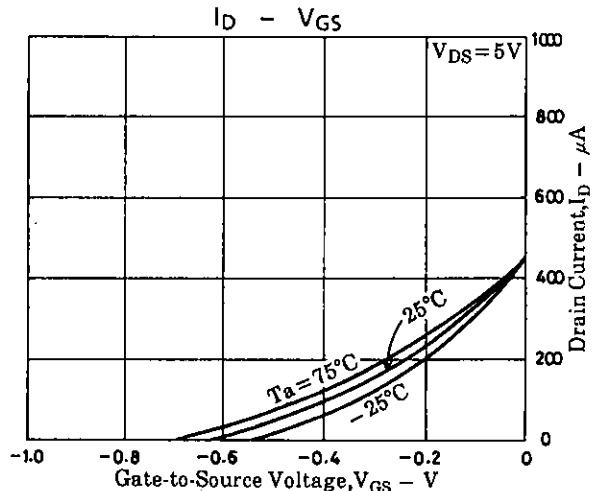
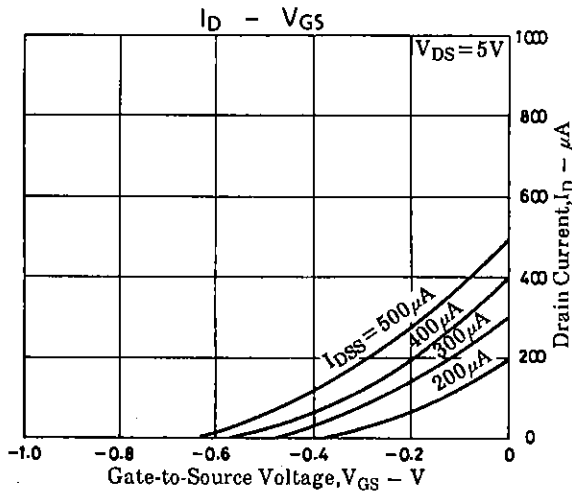
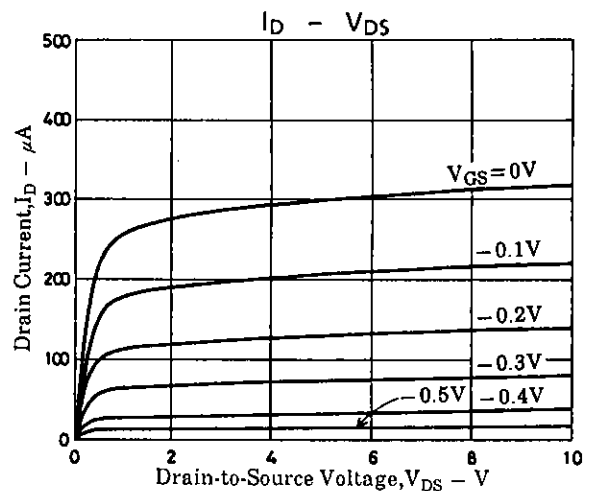
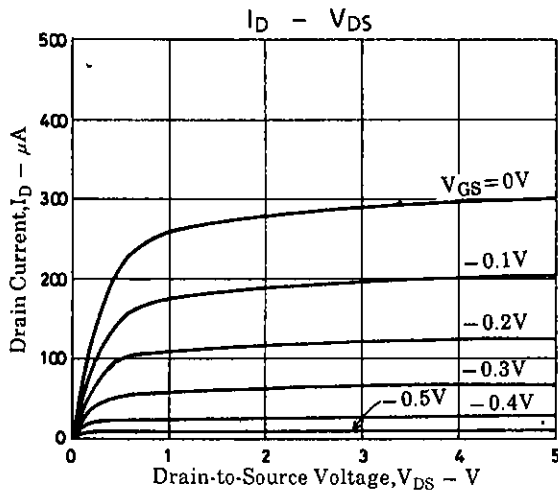
1: Source
2: Drain
3: Gate

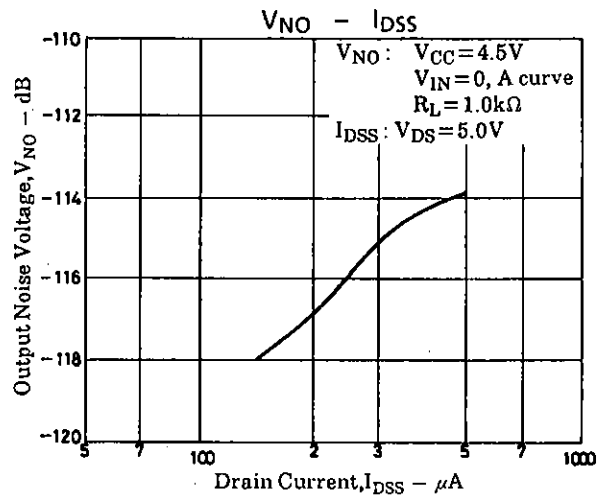
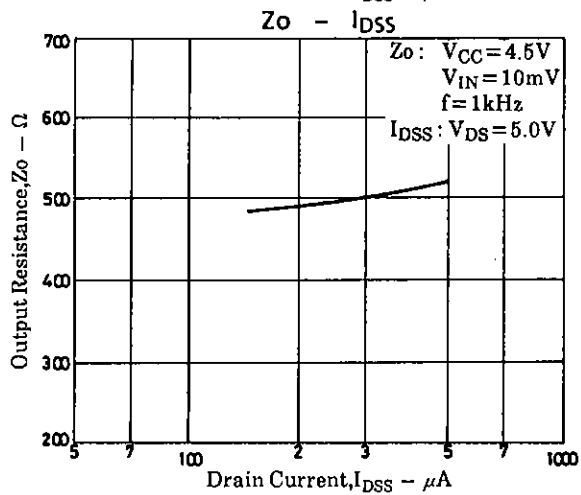
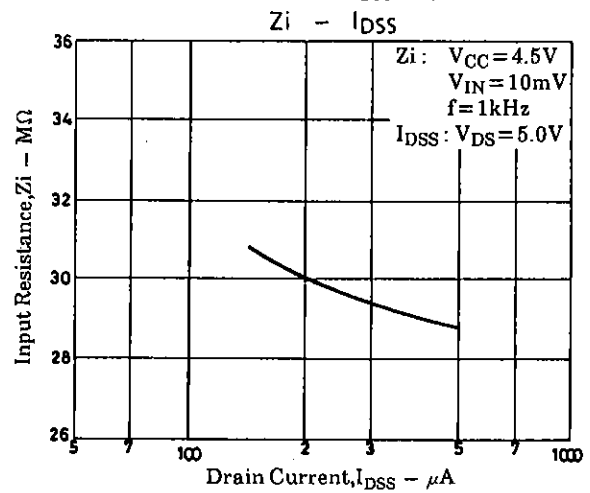
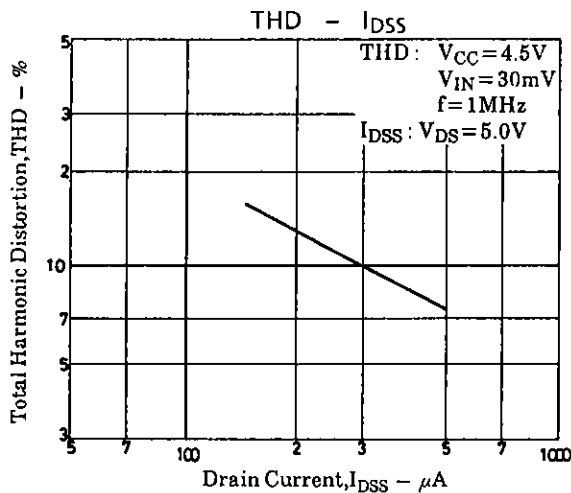
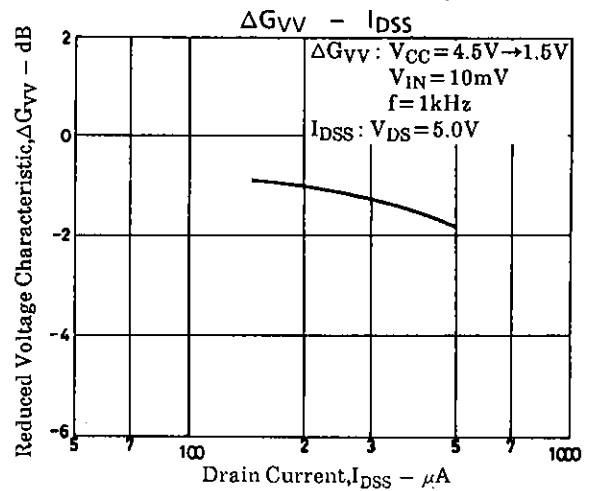
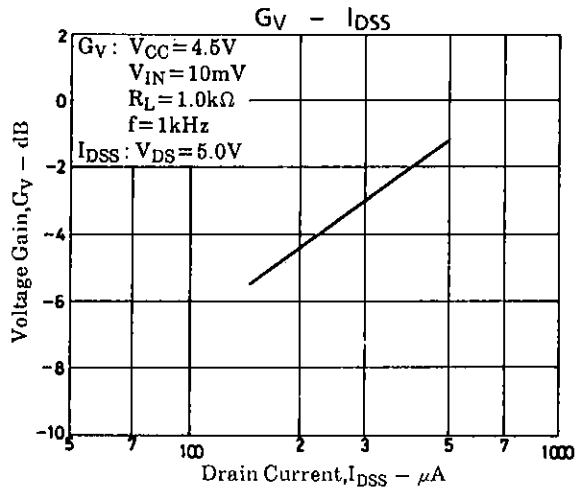
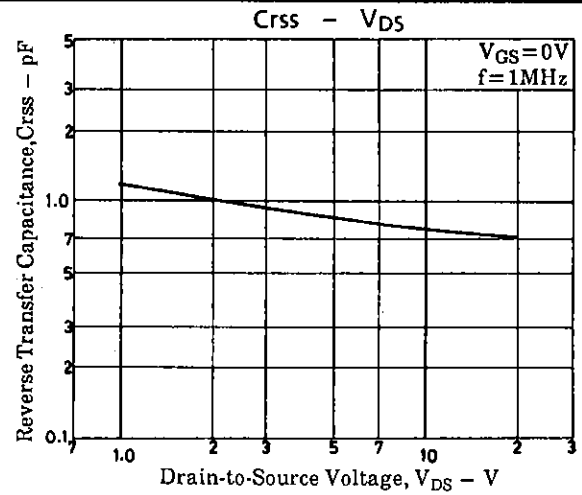
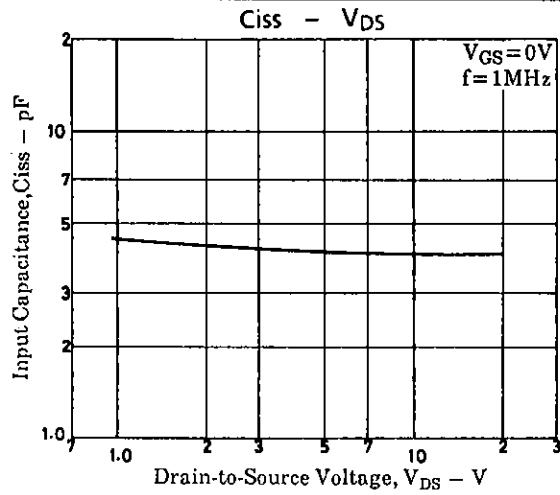
SANYO : MCP

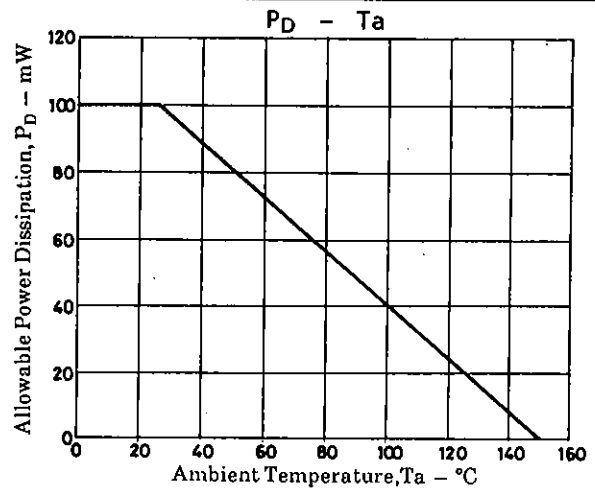
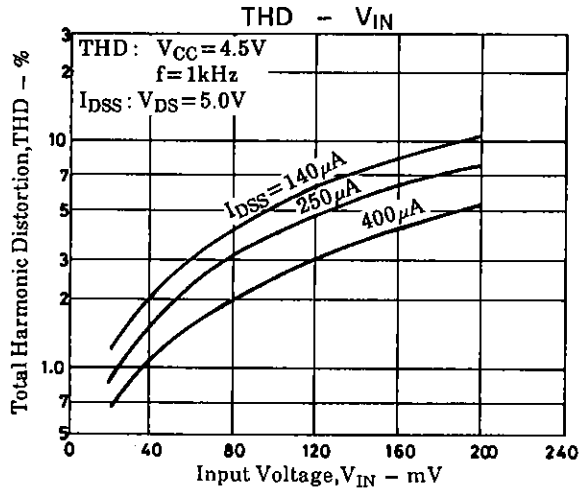
SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

[Ta = 25°C, V_{CC} = 4.5V, R_L = 1kΩ, C_{in} = 15pF, See specified Test Circuit.]

			min	typ	max	unit
Voltage Gain	G _V	V _{IN} = 10mV, f = 1kHz		-3.0		dB
Reduced Voltage Characteristic	ΔG _{VV}	V _{IN} = 10mV, f = 1kHz V _{CC} = 4.5 → 1.5V		-1.2	-3.5	dB
Frequency Characteristic	ΔG _{Vf}	f = 1kHz to 110Hz			-1.0	dB
Input Impedance	Z _{in}	f = 1kHz	25			MΩ
Output Impedance	Z _o	f = 1kHz			700	Ω
Total Harmonic Distortion	THD	V _{IN} = 30mV, f = 1kHz		1.0		%
Output Noise Voltage	V _{NO}	V _{IN} = 0, A curve			-110	dB







- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.