



## SILICON N-CHANNEL JUNCTION-TYPE FIELD EFFECT TRANSISTOR FOR CONDENSER MICROPHONE IMPEDANCE CONVERSION

### ABSOLUTE MAXIMUM RATINGS/ $T_a = 25^\circ\text{C}$

			unit
Drain-gate voltage	$V_{DGO}$	20	V
Gate current	$I_G$	10	mA
Allowable power dissipation	$P_D$	100	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage ambient temperature	$T_{stg}$	-40 ~ +125	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS/ $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Drain current	$I_{DSS}^*$	$V_{DS} = 10\text{ V}$	0.06*		1.5*	mA

[ $T_a = 25^\circ\text{C}$ ,  $V_{CC} = 4.5\text{ V}$ ,  $R_D = 680\ \Omega$ ,  $C_{in} = 15\text{ pF}$ , in specified test circuit (conforming with application circuit)]

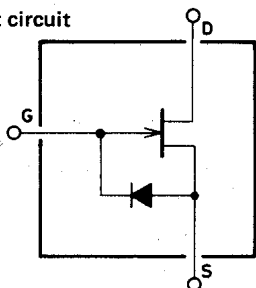
			min	typ	max	unit
Transmission loss voltage-drop characteristics	$\Delta G_{vV}$	$V_{CC} = 4.5 \sim 1.5\text{ V}$ , $f = 1\text{ kHz}$			-3	dB
Transmission loss frequency characteristics	$\Delta G_{vf}$	$f = 1\text{ k} \sim 110\text{ Hz}$ , $V_{in} = 10\text{ mV}$			-1	dB
Input impedance	$z_{in}$	$f = 1\text{ kHz}$	20 M			$\Omega$
Output noise voltage	$V_{NO}$	$V_{in} = 0$ , A-curve			-110	dB

\* 2SK156 is graded as follows by drain current  $I_{DSS}$ :

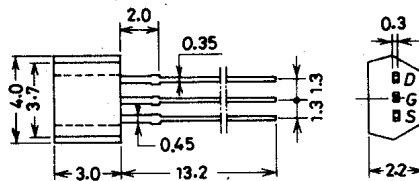
<del>0.06</del>	<del>A</del>	<del>0.3</del>	<del>0.25</del>	<del>B</del>	<del>0.8</del>	<del>0.6</del>	<del>C</del>	<del>1.5</del>
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<del>A</del>	<del>B</del>	<del>C</del>	<del>D</del>
J	K	L	M
60 - 180	150 - 300	250 - 450	400 - 800

Equivalent circuit



Case Outline 2001  
(unit: mm)



SANYO: SP

D: Drain  
G: Gate  
S: Source

These specifications are subject to change without notice.