



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

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

Parameter	Symbol	Value	Unit
Drain-gate voltage	V_{DG0}	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/ $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Condition	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)]

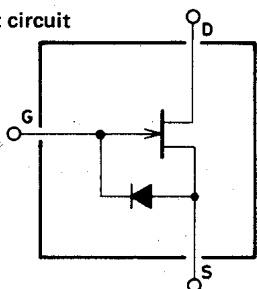
Parameter	Symbol	Test Condition	min	typ	max	unit
Transmission loss voltage-drop characteristics	ΔG_{vV}	$V_{CC} = 4.5 \sim 1.5\text{ V}$, $f = 1\text{ kHz}$			-3	dB
Transmission loss frequency characteristics	ΔG_{vf}	$f = 1\text{ k} \sim 110\text{ Hz}$, $V_{in} = 10\text{ mV}$			-1	dB
Input impedance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

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

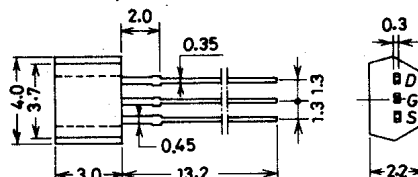
Grade	I_{DSS} Range (mA)
A	0.06 - 0.3
B	0.35 - 0.8
C	0.8 - 1.5

Grade	I_{DSS} Range (mA)
J	60 - 180
K	150 - 300
L	250 - 450
M	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.