

enhancement-type p-channel MOSFET designed for . . .



MEM511

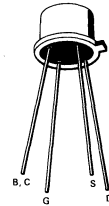
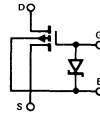
Performance Curves MKA
See Section 4

- **Audio Amplifiers**
- **Choppers**
- **Commutators**

ABSOLUTE MAXIMUM RATINGS (25°C)

Drain-to-Source Voltage	-30 V
Gate-to-Source Voltage	-30 V
Gate-to-Drain Voltage	-30 V
Drain Current	-50 mA
Gate Current (Forward Direction for Zener Clamp)	+0.1 mA
Storage Temperature	-65 to 150°C
Operating Junction Temperature	-55 to 125°C
Total Dissipation at 25°C Ambient Temperature (Derate 2.25 mW/°C)	225 mW
Lead Temperature (1/16" from case for 10 seconds)	260°C

TO-72
See Section 5



ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

Characteristic		Min	Typ	Max	Unit	Test Conditions	
1	I _{GSS} Gate Leakage Current			-1	nA	V _{GS} = -15 V, V _{DS} = V _{BS} = 0	
2	BV _{DSS} Drain-Source Breakdown Voltage	-30			V	I _D = -10 μA, V _{GS} = V _{BS} = 0	
3	V _{GS(th)} Gate Threshold Voltage	-3		-6		V _{GS} = V _{DS} , I _D = -10 μA, V _{BS} = 0	
4	I _{D(off)} Drain Cutoff Current		-0.5	-10	nA	V _{DS} = -20 V, V _{GS} = V _{BS} = 0	
5	I _{D(on)} Drain Current	-3	-6		mA	V _{GS} = V _{DS} = -10 V, V _{BS} = 0	
6	r _{DS(on)} Drain-Source ON Resistance			300	Ω	V _{GS} = -15 V, I _D = -0.1 mA, V _{BS} = 0	
7	g _{fs} Common Source Forward Transconductance	1,000			μmho	V _{GS} = V _{DS} = -10 V, V _{BS} = 0	
8	C _{gs} Gate-Source Capacitance			3	pF		f = 1 kHz
9	C _{gd} Gate-Drain Capacitance			2.5	pF		f = 10 MHz
10	C _{ds} Drain-Source Capacitance		0.15		pF		f = 1 MHz
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