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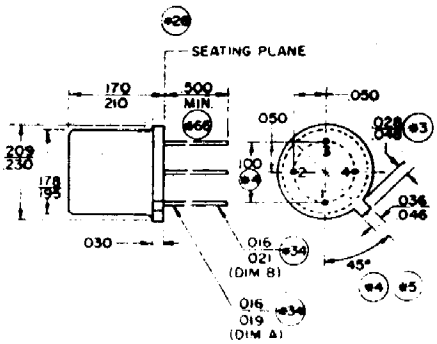
2N5265 thru 2N5270

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	60	Vdc
Drain-Gate Voltage	V_{DG}	60	Vdc
Reverse Gate-Source Voltage	$V_{GS(r)}$	60	Vdc
Drain Current	I_D	20	mAdc
Gate Current-forward	$I_{G(f)}$	10	mAdc
Total Device Dissipation @ T_A = 25°C Derate above 25°C	P_D	300 2.0	mW mW/°C
Storage Temperature Range	T_{stg}	-65 to +200	°C
Operating Junction Temperature Range	T_J	-65 to +175	°C

TO-72



ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic		Symbol	Min	Max	Unit
OFF CHARACTERISTICS					
Gate-Source Breakdown Voltage (I_G = 10 μAdc, V_{DS} = 0)		$V_{(BR)GSS}$	60	-	Vdc
Gate-Source Cutoff Voltage (V_{DS} = 15 Vdc, I_D = 1.0 μAdc)	2N5265, 2N5266 2N5267, 2N5268 2N5269, 2N5270	$V_{GS(off)}$	- - -	3.0 6.0 8.0	Vdc
Gate Reverse Current (V_{GS} = 30 Vdc, V_{DS} = 0) (V_{GS} = 30 Vdc, V_{DS} = 0, T_A = 150°C)		I_{GSS}	- -	2.0 2.0	nAdc μAdc
ON CHARACTERISTICS					
Zero-Gate Voltage Drain Current (V_{DS} = 15 Vdc, V_{GS} = 0)	2N5265 2N5266 2N5267 2N5268 2N5269 2N5270	I_{DSS}	0.5 0.8 1.5 2.5 4.0 7.0	1.0 1.8 3.0 5.0 8.0 14	mAdc
Gate-Source Voltage (V_{DS} = 15 Vdc, I_D = 0.05 mAdc) (V_{DS} = 15 Vdc, I_D = 0.08 mAdc) (V_{DS} = 15 Vdc, I_D = 0.15 mAdc) (V_{DS} = 15 Vdc, I_D = 0.25 mAdc) (V_{DS} = 15 Vdc, I_D = 0.4 mAdc) (V_{DS} = 15 Vdc, I_D = 0.7 mAdc)	2N5265 2N5266 2N5267 2N5268 2N5269 2N5270	V_{GS}	0.3 0.4 1.0 1.0 2.0 2.0	1.5 2.0 4.0 4.0 6.0 6.0	Vdc
SMALL-SIGNAL CHARACTERISTICS					
Forward Transadmittance (V_{DS} = 15 Vdc, V_{GS} = 0, f = 1.0 kHz)	2N5265 2N5266 2N5267 2N5268 2N5269 2N5270	$\lvert y_{fs} \rvert$	900 1000 1500 2000 2200 2500	2700 3000 3500 4000 4500 5000	μmhos
Forward Transconductance (V_{DS} = 15 Vdc, V_{GS} = 0, f = 100 MHz)	2N5265 2N5266 2N5267 2N5268 2N5269 2N5270	$Re(y_{fs})$	800 900 1400 1700 1900 2100	- - - - - -	μmhos
Output Admittance (V_{DS} = 15 Vdc, V_{GS} = 0, f = 1.0 kHz)		$\lvert y_{os} \rvert$	-	75	μmhos
Input Capacitance (V_{DS} = 15 Vdc, V_{GS} = 0, f = 1.0 MHz)		C_{iss}	-	7.0	pF
Reverse Transfer Capacitance (V_{DS} = 15 Vdc, V_{GS} = 0, f = 1.0 MHz)		C_{rss}	-	2.0	pF
Common-Source Noise Figure (V_{DS} = 15 Vdc, V_{GS} = 0, R_G = 1.0 M ohm, f = 100 Hz, BW = 1.0 Hz)		NF	-	2.5	dB
Equivalent Short-Circuit Input Noise Voltage (V_{DS} = 15 Vdc, V_{GS} = 0, f = 100 Hz, BW = 1.0 Hz)		e_n	-	115	nV/√Hz