

**DISCRETE PRODUCTS**

T-01-01  
T-27-25

**Switching/Amplifier Transistors**

**MOSFETs — N-Channel**

PART NUMBER	PACKAGE	$V_{GS(TH)}$ V		$BV_{DSS}$ V	$I_{DSS}$ pA		$I_{GSS}$ pA	$g_{fs}$ $\mu$ mho	$r_{DS(ON)}$ $\Omega$	$I_{D(ON)}$ mA	$I_{D(ON)}$ mA	COMMENTS
		Min	Max		Min	Max						
2N4351	TO-72	1.0	5.0	25	10nA	10	1000	300	3			High Input Z
3N170	TO-72	1.0	2.0	25	10nA	10	1000	200	10			High Input Z
3N171	TO-72	1.5	3.0	25	10nA	10	1000	200	10			High Input Z
IT1750	TO-72	0.5	3.0	25	10nA	10	3000	50	10			Low $r_{DS(ON)}$
M116	TO-72	1.0	5.0	30	10nA	100		100				Diode Protected
M117	TO-72	1.0	5.0	30	10nA	1		100				High Input Z

**MOSFETs — P-Channel**

Generally used where max. isolation between signal source and logic drive is required: switch "On" resistance varies with signal amplitude.

PART NUMBER	PACKAGE	$V_{GS(TH)}$ V		$BV_{DSS}$ V	$I_{DSS}$ pA		$I_{GSS}$ pA	$g_{fs}$ $\mu$ mho	$r_{DS(ON)}$ $\Omega$	$I_{D(ON)}$ mA	$I_{D(ON)}$ mA	COMMENTS
		Min	Max		Min	Max						
2N4352	TO-72	-1.0	-5.0	-25	-10nA	10	1000	600	-3			High Input Z
3N163	TO-72	-2.0	-5.0	-40	-200	-10	2000	250	-5	-30		High Input Z
3N164	TO-72	-2.0	-5.0	-30	400	10	1000	300	-3	-30		High Input Z
3N172	TO-72	-2.0	-5.0	-40	-400	-200		250	-5	-30		Diode Protected
3N173	TO-72	-2.0	-5.0	-30	-10nA	-500		350	-5	-30		Diode Protected
IT1700	TO-72	-2.0	-5.0	-40	200		2000	400	-2			High Input Z
IT1701	TO-72	-2.0	-5.0	-40	200	100	2000	400	-2			Diode Protected

**Diodes, Low Leakage** Used to protect the inputs of MOSFETs such as 3N163, while maintaining input leakage < 0.1 pA.

PART NUMBER	PACKAGE	$I_R @ 1V$ (pA)	$I_R @ 10V, 125^\circ C$ (nA)	$BV_R @ 1\mu A$ (V)	$V_F @ 10mA$ (V)		COMMENTS
		Typ	Max	Min	Min	Max	
ID100	TO-78	0.1	10	30	0.8	1.1	(Note 1)
ID101	TO-71	0.1	10	30	0.8	1.1	(Note 1)

Note 1. Used to protect the inputs of MOSFETs such as 3N163, while maintaining input leakage < 0.1pA.