

1

Switches and Amplifiers — MOSFET

Ordering Information		$V_{GS(1h)}$		$BV_{GSS}$ min V	$I_{DSS}$ max pA	$I_{GSS}$ max pA	$g_{fs}$ min $\mu mho$	$r_{DS(on)}$ max $\Omega$	$I_{D(on)}$ min mA	$I_Q(on)$ max mA	
Preferred Part Number	Package	$V_{GS(off)}$ min/max V	$V_{GS(off)}$ min/max V								
<b>P-Channel Enhancement:</b> Gen. used where max isolation between signal source and logic drive required; sw. "On" resistance varies with signal amplitude.											
3N161	T0-72	-1.5	-5.0	-25	-10 nA	-100.0	3500.0	—	-40	-120	Diode Protected
3N163	T0-72	-2.0	-5.0	-40	-200	-10.0	2000.0	250	- 5	- 30	
3N164	T0-72	-2.0	-5.0	-30	400	10.0	1.0	300	- 3	- 30	
3N172	T0-72	-2.0	-5.0	-40	-400	-10.0	1500.0	250	- 5	- 30	Diode Protected
3N173	T0-72	-2.0	-5.0	-30	-10 nA	-500.0	—	350	- 5	- 30	
IT1700	T0-72	-2.0	-5.0	-40	200	10.0	2.0	400	2	—	
<b>N-Channel Enhancement:</b> Can switch positive signals directly from TTL logic; gen. requires driver or translator circuit to switch bipolar signals.											
2N4351	T0-72	1.0	5.0	25	10 nA	10.0	1000.0	300	3	—	
3N170	T0-72	1.0	2.0	25	10 nA	10.0	1000.0	200	10	—	
3N171	T0-72	1.5	3.0	25	10 nA	10.0	1000.0	200	10	—	
IT1750	T0-72	0.5	3.0	25	10 nA	10.0	30.0	50	10	100	
M116	T0-72	1.0	5.0	30	—	100.0	—	100	—	—	Diode Protected

Special Function

ID-100 ID-101 These products are back to back diode combinations used to protect those P-channel MOSFET duals which are not diode protected. Their chief characteristic is  $< 1$  pA leakage when voltage across them is less than 5 mV. If voltage across diodes is adjusted to  $0V \pm 0.1$  mV, leakage is less than 0.01 pA.

VCR2N VCR3P VCR4N VCR5P VCR7N The VCR family consists of three terminal variable resistors where the resistance value between two of the terminals is controlled by the voltage potential applied to the third.