

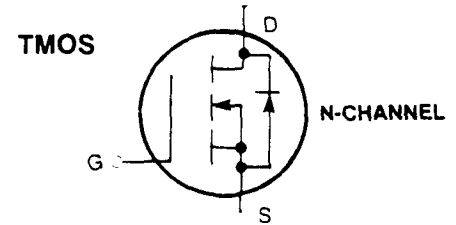
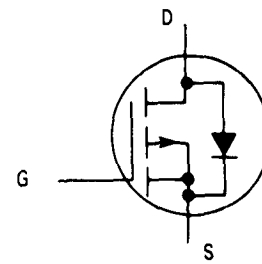
Small-Signal TMOS

TMOS Power MOSFETs

Power MOSFETs, Motorola trademark TMOS, are FET transistors with an oxide insulated gate which controls vertical current flow.

This basic description fits a number of structures and process titles including Vertical DMOS, HEXMOS, TMOS, UMOS, Vertical MOS, and VMOS.

There are subtle parametric tradeoffs with these different products but they all exhibit higher impedance, faster switching, enhanced thermal stability, and easier paralleling than bipolar transistors. In addition, they have lower "on" resistance and higher power handling capability than conventional horizontal MOSFETs or JFETs.



Package	Device	$r_{ds(on)}$		$V_{GS}(t/h)$		I_{DSS}	$V_{(BR)DSS}$	I_{GSS}	C_{iss}	C_{rss}	t_{on}	t_{off}
		Ω Max	@ I_D (A)	Min	Max							
TO39 N CH TYPES	MFE930	1.4	1.0	1.0	3.5	10	35	50	70	18	15	15
	MFE960	1.7	1.0	1.0	3.5	10	60	50	70	18	15	15
	MFE990	2.0	1.0	1.0	3.5	10	90	50	70	18	15	15
	MFE910	5.0	0.5	0.3	2.5	10	60	10	—	—	5.0+	5.0+
	2N6659	1.8	1.0	0.8	2.0	10	35	100	50	10	5.0	5.0
	2N6660	3.0	1.0	0.8	2.0	10	60	100	50	10	5.0	5.0
	2N6661	4.0	1.0	0.8	2.0	10	90	100	50	10	5.0	5.0
	IRFF110	0.6	1.5	2	4	250	100	100	200	25	20	25
	IRFF111	0.6	1.5	2	4	250	60	100	200	25	20	25
	IRFF112	0.8	1.5	2	4	250	100	100	200	25	20	25
	IRFF113	0.8	1.5	2	4	250	60	100	200	25	20	25
	IRFF120	0.3	3	2	4	250	100	100	600	100	40	100
	IRFF121	0.3	3	2	4	250	60	100	600	100	40	100
	IRFF122	0.4	3	2	4	250	100	100	600	100	40	100
	IRFF123	0.4	3	2	4	250	60	100	600	100	40	100
	IRFF210	1.5	1.25	2	4	250	200	100	150	25	15	15
	IRFF211	1.5	1.25	2	4	250	150	100	150	25	15	15
	IRFF212	2.4	1.25	2	4	250	200	100	150	25	15	15
	IRFF213	2.4	1.25	2	4	250	150	100	150	25	15	15
	IRFF220	0.8	2	2	4	250	200	100	600	80	40	100
	IRFF221	0.8	2	2	4	250	150	100	600	80	40	100
	IRFF222	1.2	2	2	4	250	200	100	600	80	40	100
	IRFF223	1.2	2	2	4	250	150	100	600	80	40	100
	IRFF230	0.4	3	2	4	250	200	100	800	150	30	50
	IRFF231	0.4	3	2	4	250	150	100	800	150	30	50
	IRFF232	0.6	3	2	4	250	200	100	800	150	30	50
	IRFF233	0.6	3	2	4	250	150	100	800	150	30	50
	IRFF330	1	2	2	4	250	400	100	900	80	30	55
	IRFF331	1	2	2	4	250	350	100	900	80	30	55
	IRFF332	1.5	2	2	4	250	400	100	900	80	30	55
	IRFF430	1.5	1.5	2	4	250	500	100	800	60	30	55
	IRFF431	1.5	1.5	2	4	250	450	100	800	60	30	55
	IRFF432	2	1.5	2	4	250	500	100	800	60	30	55
IRFF433	2	1.5	2	4	250	450	100	800	60	30	55	
2N6782	0.6	2.25	2	4	250	100	100	200	25	15	25	
2N6784	1.5	1.5	2	4	250	200	100	200	25	15	30	
2N6786	3.6	0.8	2	4	250	400	100	200	15	15	35	
2N6788	0.3	3.5	2	4	250	100	100	600	100	40	40	
2N6790	0.8	2.25	2	4	250	200	100	600	80	40	50	
2N6792	1.8	1.25	2	4	250	400	100	600	40	40	60	
2N6794	3.0	1.0	2	4	250	500	100	600	40	40	60	
2N6796	0.8	5.0	2	4	250	100	100	900	150	30	40	
2N6798	0.4	3.5	2	4	250	200	100	900	150	30	50	
2N6800	1	2.0	2	4	250	400	100	900	80	30	55	
2N6802	1.5	1.5	2	4	250	500	100	900	60	30	55	