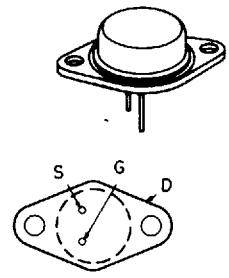
Power MOSFETS

ECG Type	Description and Application	Transconductance gfs mhos	Drain to Source Breakdown Voltage BV_{DSS}	Gate to Source Breakdown Voltage BV_{GS}	Continuous Drain Current I_D Amps	Gate to Source Cutoff Voltage $V_{GS(off)}$	Drain to Source Resistance $r_{DS(on)}$ Ohms	Input Cap C_{iss} pf	Device Dissipation @T_C=25°C P_D Watts	Package Case/Fig./Basing
ECG2392 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	6 Min	100 Min	±20 Max*	32	4 Max	.06 Max	1500 Typ	125 Max	**TO-3** Fig. T28
						td(off)=300 ns, td(on)=50 ns, tf=200 ns, tr=200 ns				
ECG2386 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	2 Min	600 Min	±20 Max*	6	4.5 Max	1.2 Max	1800 Max	150 Max	
						td(off)=200 ns, td(on)=60 ns, tf=120 ns, tr=150 ns				
ECG2384 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	1.8 Min	800 Min	±20 Max*	6	4 Max	1.5 Max	3500 Max	125 Max	
						td(off)=500 ns, td(on)=60 ns, tf=100 ns, tr=100 ns				
ECG2390 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	3 Min	60 Min	±20 Max*	12	4.5 Max	.2 Max	800 Max	75 Max	**TO-220** Fig. T41
						td(off)=80 ns, td(on)=60 ns, tf=110 ns, tr=160 ns				
ECG2382 ▲ (Compl to ECG2383)	MOSFET, N-Ch, Enhancement Hi Speed Switch	1.5 Min	100 MIn	±20 Max*	8	4 Max	.5 Max	750 Max	75 Max	
						td(off)=50 ns, td (on)=50 ns, tf=60 ns, tr=120 ns				
ECG2383 ▲ (Compl to ECG2382)	MOSFET, P-Ch, Enhancement Hi Speed Switch	2 Min	100 Min	±20 Max*	8	4.5 Max	.4 Max	1200 Max	75 Max	
						td(off)=200 ns, td(on)=80 ns, tf=150 ns, tr=150 ns				
ECG66 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	3 Min	100 Min	±20 Max*	12	4.5 Max	.18 Max	1200 Max	75 Max	
						td(off)=200 ns, td(on)=50 ns, tf=100 ns, tr=100 ns				
ECG2388 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	5 Min	200 Min	±20 Max*	12.5	4 Max	.2 Max	1000 Typ	75 Max	
						td(off)=120 ns, td(on)=20 ns, tf=60 ns, tr=60 ns				
ECG67 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	2 Min	400 Min	±20 Max*	5	4.5 Max	1.5 Max	1200 Max	75 Max	
						td(off)=200 ns, td(on)=50 ns, tf=100 ns, tr=100 ns				
ECG2380 ▲ (Compl to ECG2381)	MOSFET, N-Ch, Enhancement Hi Speed Switch	1 Min	500 Min	±20 Max*	2	4.5 Max	4 Max	500 Max	75 Max	
						td(off)=60 ns, td(on)=40 ns, tf=30 ns, tr=60 ns				
ECG2381 ▲ (Compl to ECG2380)	MOSFET, P-Ch, Enhancement Hi Speed Switch	.5 Min	500 Min	±20 Max*	2	4.5 Max	6 Max	1000 Max	75 Max	
						td(off)=150 ns, td(on)=150 ns, tf=50 ns, tr=100 ns				
ECG2385 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	5 Min	500 Min	±30 Max*	8	4 Max	.8 Max	1800 Max	125 Max	
						td(off)=250 ns, td(on)=40 ns, tf=90 ns, tr=90 ns				
ECG2387 ▲	MOSFET, N-Ch, Enhancement Hi Speed Switch	3 Min	800 Min	±30 Max*	4	4 Max	3 Max	1250 Max	125 Max	
						td(off)=150 ns, td(on)=25 ns, tf=60 ns, tr=40 ns				



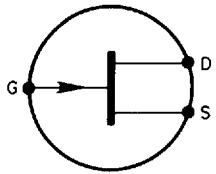
* Warning - Exceeding BV_{GS} maximum will result in permanent damage to the gate region oxide layer.

Package Outline - See Page 1-76

▲ Refer to MOSFET Handling Precautions - Page 1-31

FET and MOSFET Diagrams (Observe MOS Handling) ▲

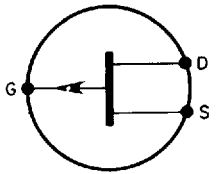
Depletion N-Ch JFET



ECG

312 456
451 457 461 (Dual) 468
452 458 466 469
453 459 467

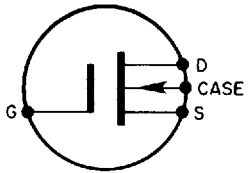
Depletion P-Ch JFET



ECG

326
460
489

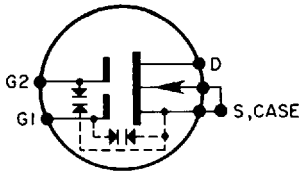
Depletion N-Ch MOSFET



ECG

220
462

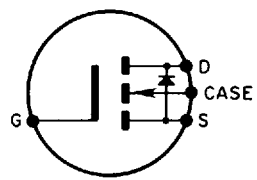
Dual Gate Depletion N-Ch MOSFET



ECG

221
222 (Gate Protected)
454 (Gate Protected)
455 (Gate Protected)

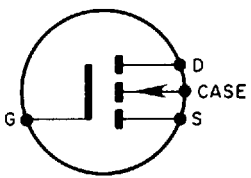
Enhancement N-Ch MOSFET



ECG

66 2382 2386 2390
67 2384 2387 2392
2380 2385 2388

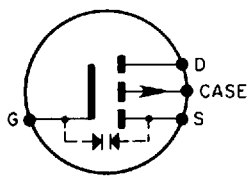
Enhancement N-Ch MOSFET



ECG

465

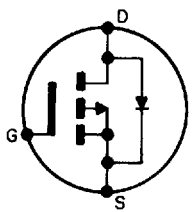
Enhancement P-Ch MOSFET



ECG

463 (Dual)
(Gate Protected)
464

Enhancement P-Ch MOSFET



ECG

2381
2382