




Silicon Small Signal Transistors (cont'd)

Breakdown Voltage		Type		Application	Collector Current I_C (A)	Collector Diss. PD (W)	Current Gain hFE	Freq in MHz f_t	Package																																																																																																																
BVCBO	BVCEO	NPN	PNP						Case/Basing																																																																																																																
25	12	ECG10	---	Lo Noise UHF/VHF Amp (GPE = 10 dB typ)	70 mA	.600	40 min	5 GHz	TO-92 T16  <table border="1" data-bbox="1292 331 1474 1125"> <thead> <tr> <th>ECG</th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr><td>10</td><td>B</td><td>E</td><td>C</td></tr> <tr><td>11</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>12</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>23</td><td>B</td><td>E</td><td>C</td></tr> <tr><td>46</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>47</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>69</td><td>B</td><td>E</td><td>C</td></tr> <tr><td>85</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>107</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>108</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>123AP</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>159</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>172A</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>194</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>199</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>229</td><td>B</td><td>E</td><td>C</td></tr> <tr><td>232</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>233</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>234</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>287</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>288</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>289A</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>290A</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>319P</td><td>B</td><td>E</td><td>C</td></tr> <tr><td>2341</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>2342</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>2503</td><td>E</td><td>C</td><td>B</td></tr> </tbody> </table>	ECG	1	2	3	10	B	E	C	11	E	C	B	12	E	C	B	23	B	E	C	46	E	B	C	47	E	B	C	69	B	E	C	85	E	C	B	107	E	C	B	108	E	B	C	123AP	E	B	C	159	E	B	C	172A	E	C	B	194	E	B	C	199	E	C	B	229	B	E	C	232	E	B	C	233	E	B	C	234	E	C	B	287	E	B	C	288	E	B	C	289A	E	C	B	290A	E	C	B	319P	B	E	C	2341	E	C	B	2342	E	C	B	2503	E	C	B
ECG	1	2	3																																																																																																																						
10	B	E	C																																																																																																																						
11	E	C	B																																																																																																																						
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69	B	E	C																																																																																																																						
85	E	C	B																																																																																																																						
107	E	C	B																																																																																																																						
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123AP	E	B	C																																																																																																																						
159	E	B	C																																																																																																																						
172A	E	C	B																																																																																																																						
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287	E	B	C																																																																																																																						
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319P	B	E	C																																																																																																																						
2341	E	C	B																																																																																																																						
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2503	E	C	B																																																																																																																						
27	18	---	ECG12	Hi Gain, Hi Current Gen Purp	5	.75	180 min	120																																																																																																																	
30	14	ECG23	---	Lo Noise, UHF, VHF Amp, RF Amp, HF IF Amp (GPE = 15 dB typ)	50 mA	.25	80	2 GHz																																																																																																																	
30	15	ECG108	---	RF/IF Video Amp, Osc	50 mA	.6	20 min	800 min																																																																																																																	
30	25	ECG2503	---	Gen Purp Amp, Hi Gain, Sw, $t_f = .06 \mu s$ (typ)	.7	.6	800 min	270																																																																																																																	
30	30	ECG233	---	Gen Purp	.1	.625	45 typ	300																																																																																																																	
30	30	---	ECG232	Gen Purp-Darlington	.3	.625	50,000 typ	175																																																																																																																	
35	35	ECG69	---	TV UHF/VHF Amp	50 mA	.25	70 typ	800 min																																																																																																																	
35	35	ECG107	---	TV UHF/VHF Amp	50 mA	.25	70 typ	800 min																																																																																																																	
40	20	ECG11	---	Hi Gain, Hi Current Gen Purp	5	.75	200 min	150																																																																																																																	
40	30	ECG319P	---	TV IF Amp, AGC Controlled (Includes Metal Shield)	50 mA	.5	35 typ	300 min																																																																																																																	
40	40	ECG172A	---	Gen Purp-Darlington	.3	.4	7,000 min	60																																																																																																																	
40	40	ECG229	---	VHF Osc, IF Amp	50 mA	.425	30 min	600																																																																																																																	
45	45	ECG47	---	Gen Purp, Hi Gain Amp	.2	.35	500 min	140																																																																																																																	
60	50	---	ECG234	Gen Purp, Hi Gain Amp	50 mA	.2	400 typ	80 min																																																																																																																	
70	50	ECG199	---	Gen Purp, Hi Gain Amp	.1	.36	400 typ	90 min																																																																																																																	
70	70	ECG85	---	Gen Purp Amp, Sw	.4	.6	120 min	200 min																																																																																																																	
75/80	40/80	ECG123AP	ECG159	Gen Purp	.6/1.0	.6	200 typ	300/200																																																																																																																	
90	80	ECG2341	ECG2342	Darlington Driver, Sw, $t_{off} = 1.5 \mu s$ (typ)	1	.80	2,000 min	---																																																																																																																	
100	80	ECG289A	ECG290A	Gen Purp, Pwr Amp	.5	.5	100 min	120																																																																																																																	
100	100	ECG46	---	Gen Purp-Darlington	.5	.625	10,000 min	200																																																																																																																	
180	160	ECG194	---	Hi Speed Sw, Amp, $t_f = .4 \mu s$ (typ)	.6	.35	100 typ	100																																																																																																																	
300	300	ECG287	ECG288	HV Gen Purp	.5	.625	40 min	50																																																																																																																	
• TO-98 Alt. Case - Fig. T15																																																																																																																									
40	40	ECG172A	---	Gen Purp-Darlington	.3	.4	7,000 min	60	TO-98 Fig. T15  TO-92 Alt. Case - Fig. T16 																																																																																																																
70	50	ECG199	---	Gen Purp, Hi Gain Amp	.1	.36	400	90																																																																																																																	
40	40	---	ECG217	Very Hi Speed Sw, Amp, $t_f = 30 ns$ (max)	1	1	40 min	175	TO-237 Fig. T17  <table border="1" data-bbox="1328 1564 1469 1753"> <thead> <tr> <th>ECG</th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr><td>24</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>25</td><td>E</td><td>C</td><td>B</td></tr> <tr><td>128P</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>129P</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>216</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>217</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>227</td><td>E</td><td>B</td><td>C</td></tr> <tr><td>255</td><td>E</td><td>B</td><td>C</td></tr> </tbody> </table>	ECG	1	2	3	24	E	C	B	25	E	C	B	128P	E	B	C	129P	E	B	C	216	E	B	C	217	E	B	C	227	E	B	C	255	E	B	C																																																																												
ECG	1	2	3																																																																																																																						
24	E	C	B																																																																																																																						
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128P	E	B	C																																																																																																																						
129P	E	B	C																																																																																																																						
216	E	B	C																																																																																																																						
217	E	B	C																																																																																																																						
227	E	B	C																																																																																																																						
255	E	B	C																																																																																																																						
80	50	ECG216	---	Very Hi Speed Sw, Core Driver, $t_f = 20 ns$ (typ)	1.5	1	60 min	300																																																																																																																	
100	80	ECG24	ECG25	Gen Purp Amp, Sw	1.25	1	80 min	50																																																																																																																	
100/80	80	ECG128P	ECG129P	Gen Purp Amp, Sw	1	1	100 min	100/150																																																																																																																	
300	300	ECG227	---	HV Amp, Video Output	.1	1	40 min	50																																																																																																																	
325	300	ECG255	---	Horiz Driver, Amp, Sw	1	1	30 min	30 min																																																																																																																	

Package Outlines - See Page 1-78