

Bipolar Power Transistors

STC is one of few remaining manufacturers of NPN and PNP power transistors and Darlington types. We maintain QML status on over 135 bipolar power transistor and Darlington types. All types listed in this catalog are QML qualified and are available as JAN, JANTX, and JANTXV, unless noted. In addition to the devices listed here, STC offers a number of other standard types, which are available, screened to "TX", "TXV", and "S" levels.

STC's bipolar transistors are also available in a variety of custom packages, including surface mount, through-hole, chassis-mount, and multi-chip module configurations.

Contact your local Representative, or the factory, for your custom requirements, or for types not listed in this catalog.

NPN Power Transistors

Package	Part Number	B _{VCEO} (volts)	I _C (amps)	Min-Max	h _{FE}	V _{CE(SAT)}	
					@I _C /V _{CE} (amps/volts)	Max (volts)	@I _C /I _B (amps)
 TO-3	2N3715 ⁽¹⁾	60	10	50 - 150	1 / 2	0.8	5 / 0.5
	2N3716 ⁽¹⁾	80	10	50 - 150	1 / 2	0.8	5 / 0.5
	2N3902 ⁽²⁾	325	2.5	30 - 90	1 / 5	0.8	1 / 0.1
	2N5157 ⁽²⁾	400	3.5	30 - 90	1 / 5	0.8	1 / 0.1
	2N5302	60	30	15 - 60	15 / 2	1.7	15 / 2
	2N5303	80	20	15 - 60	10 / 4	1.5	10 / 2
	2N6249	225	10	10 - 50	10 / 3	1.5	10 / 1
	2N6250	300	10	8 - 50	10 / 3	1.5	10 / 1.25
	2N6251	375	10	6 - 50	10 / 3	1.5	10 / 1.67
	2N6338	100	25	30 - 120	10 / 2	1.0	10 / 1
 TO-3/.060 pins	2N6341	150	25	30 - 120	10 / 2	1.0	10 / 1
	2N5685	60	50	15 - 60	25 / 2	1.0	25 / 2.5
	2N5686	80	50	15 - 60	25 / 2	1.0	25 / 2.5
	2N6274	100	50	30 - 200	20 / 4	1.2	20 / 0.2
	2N6277	150	50	30 - 200	20 / 4	1.2	20 / 0.2

Notes: 1. Available as JANTX and JANTXV only.
2. Available as JAN and JANTX only.

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Package	Part Number	B _{VCE0} (volts)	I _C (amps)	Min-Max	h _{FE}	V _{CE(SAT)}	
					@I _C /V _{CE} (amps/volts)	Max (volts)	@I _C /I _B (amps)
 TO-5 / TO-39	2N3418, S ⁽¹⁾	60	3	20 - 60	1 / 2	0.5	2 / 0.2
	2N3419, S ⁽¹⁾	80	3	20 - 60	1 / 2	0.5	2 / 0.2
	2N3420, S ⁽¹⁾	60	3	40 - 120	1 / 2	0.5	2 / 0.2
	2N3421, S ⁽¹⁾	80	3	40 - 120	1 / 2	0.5	2 / 0.2
	2N3439, L ⁽²⁾	350	1	40 - 160	.02 / 10	0.5	.05 / .004
	2N3440, L ⁽²⁾	250	1	40 - 160	.02 / 10	0.5	.05 / .004
	2N3506, L ⁽²⁾	40	3	40 - 200	1.5 / 2	1.0	1.5 / 0.15
	2N3507, L ⁽²⁾	50	3	30 - 150	1.5 / 2	1.0	1.5 / 0.15
	2N4150, S ⁽¹⁾	70	10	40 - 120	5 / 5	0.6	5 / 0.5
	2N5237, S ⁽¹⁾	120	10	40 - 120	5 / 5	0.6	5 / 0.5
	2N5238, S ⁽¹⁾	170	10	40 - 120	5 / 5	0.6	5 / 0.5
	2N5662	200	2	40 - 120	0.5 / 5	0.4	1 / 0.1
	2N5663	300	2	25 - 75	0.5 / 5	0.4	1 / 0.1
	2N5666	200	5	40 - 120	1 / 5	0.4	3 / 0.3
	2N5667	300	5	25 - 75	1 / 5	0.4	3 / 0.3

- Notes: 1. "S" suffix parts are in TO-39 package. No suffix indicates TO-5 package.
2. "L" suffix parts are in TO-5 package. No suffix indicates TO-39 package.
3. Devices with no notation after the part number are in TO-5 package.
4. All TO-5 and TO-39 transistors listed above are available as JAN, JANTX, and JANTXV.

Package	Part Number	B _{VCE0} (volts)	I _C (amps)	Min-Max	h _{FE}	V _{CE(SAT)}	
					@I _C /V _{CE} (amps/volts)	Max (volts)	@I _C /I _B (amps)
 TO-66	2N3584	300	5	25 - 100	1 / 10	0.75	1 / 0.125
	2N3585	400	5	25 - 100	1 / 10	0.75	1 / 0.125
	2N3739	300	2	40 - 200	0.1 / 10	2.5	.25 / .025
	2N3766	60	1	40 - 160	0.5 / 5	1.0	0.5 / 0.05
	2N3767	80	1	40 - 160	0.5 / 5	1.0	0.5 / 0.05
	2N3879 ⁽¹⁾	75	7	12 - 100	4 / 2	1.2	4 / 0.4
	2N5660	200	2	40 - 120	0.5 / 5	0.4	1 / 0.1
	2N5661	300	2	25 - 75	0.5 / 5	0.4	1 / 0.1
	2N5664	200	5	40 - 120	1 / 5	0.4	3 / 0.3
	2N5665	300	5	25 - 75	1 / 5	0.4	3 / 0.3

- Notes: 1. Available as JANTX and JANTXV only. All others are available as JAN, JANTX, and JANTXV.

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Package	Part Number	B _{VCE0} (volts)	I _C (amps)	Min-Max	h _{FE}	V _{CE(SAT)}	
					@I _C /V _{CE} (amps/volts)	Max (volts)	@I _C /I _B (amps)
	2N3749 ⁽¹⁾	80	5	40 - 120	1 / 5	0.25	1 / 0.1
	2N3996 ⁽¹⁾	80	5	40 - 120	1 / 2	0.25	1 / 0.1
	2N3997 ⁽¹⁾	80	5	80 - 240	1 / 2	0.25	1 / 0.1
	2N3998 ⁽²⁾	80	5	40 - 120	1 / 2	0.25	1 / 0.1
	2N3999 ⁽²⁾	80	5	80 - 240	1 / 2	0.25	1 / 0.1

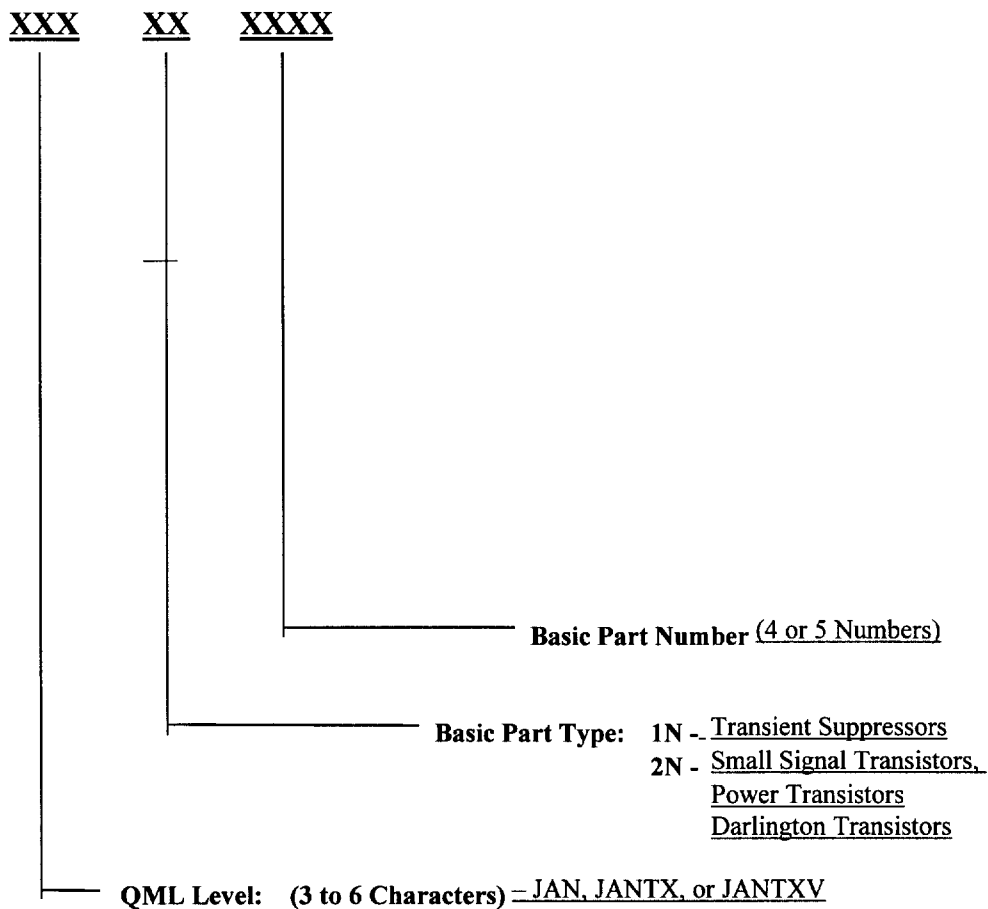
- Notes: 1. TO-111 isolated package.
2. TO-59 package.
4. All TO-59 and TO-111 transistors listed above are available as JAN, JANTX, and JANTXV.

Package	Part Number	B _{VCE0} (volts)	I _C (amps)	Min-Max	h _{FE}	V _{CE(SAT)}	
					@I _C /V _{CE} (amps/volts)	Max (volts)	@I _C /I _B (amps)
	2N3846 ⁽¹⁾	200	20	40 - --	5 / 5	0.75	10 / 1
	2N3847 ⁽¹⁾	300	20	40 - --	5 / 5	0.75	10 / 1

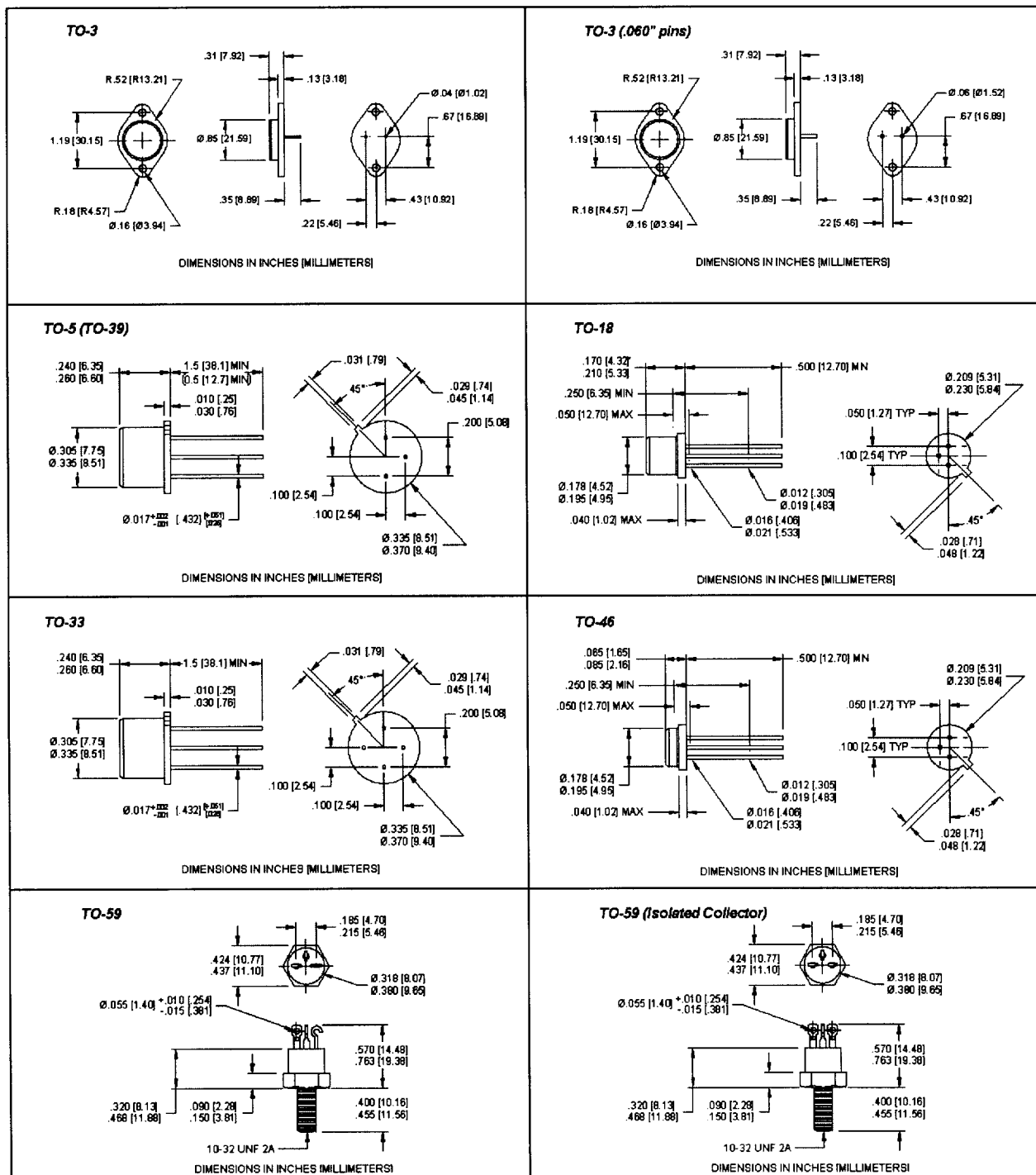
- Notes: 1. Available as JAN and JANTX only.

Part Number Ordering Information

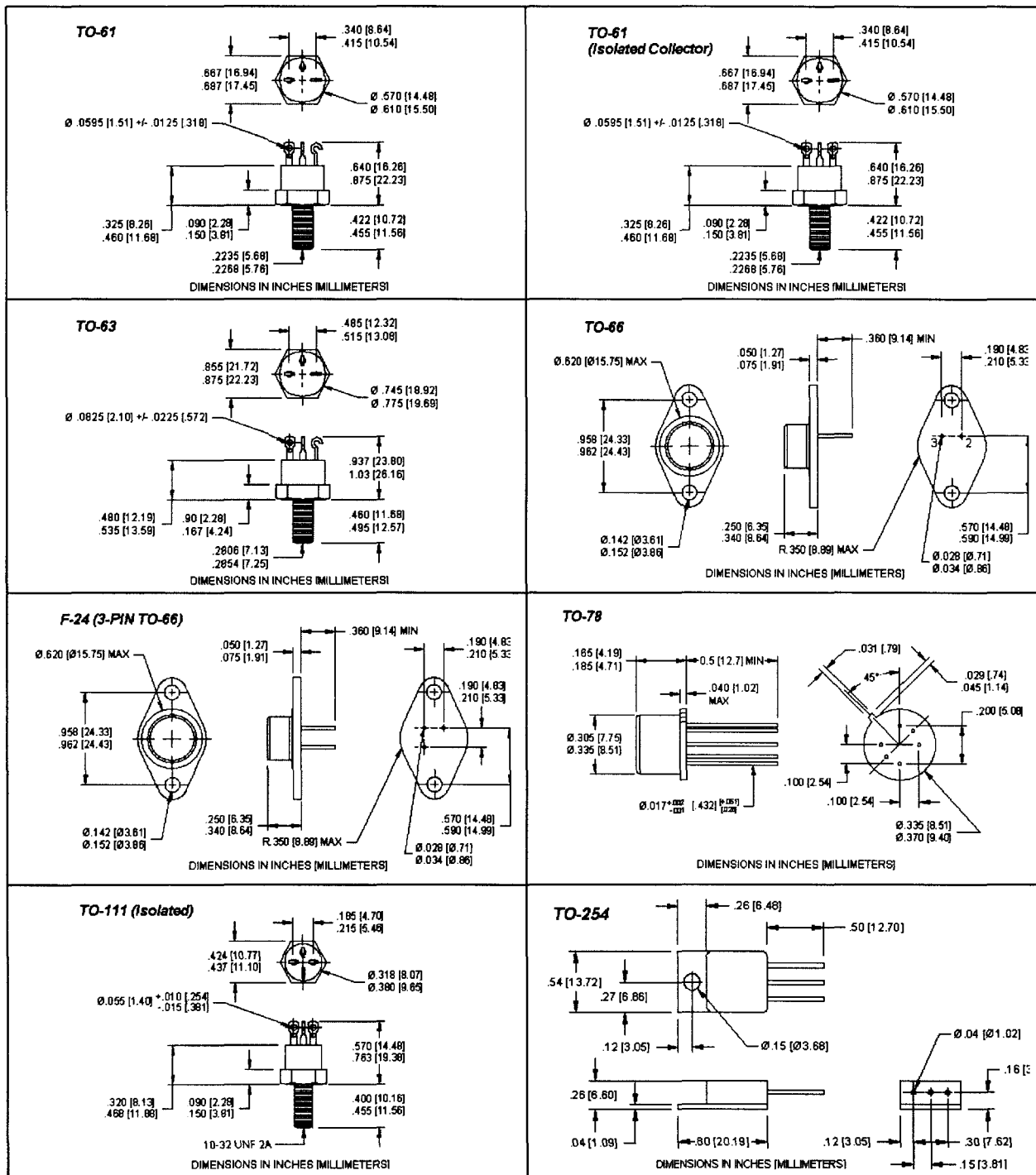
STC QML Part Numbers



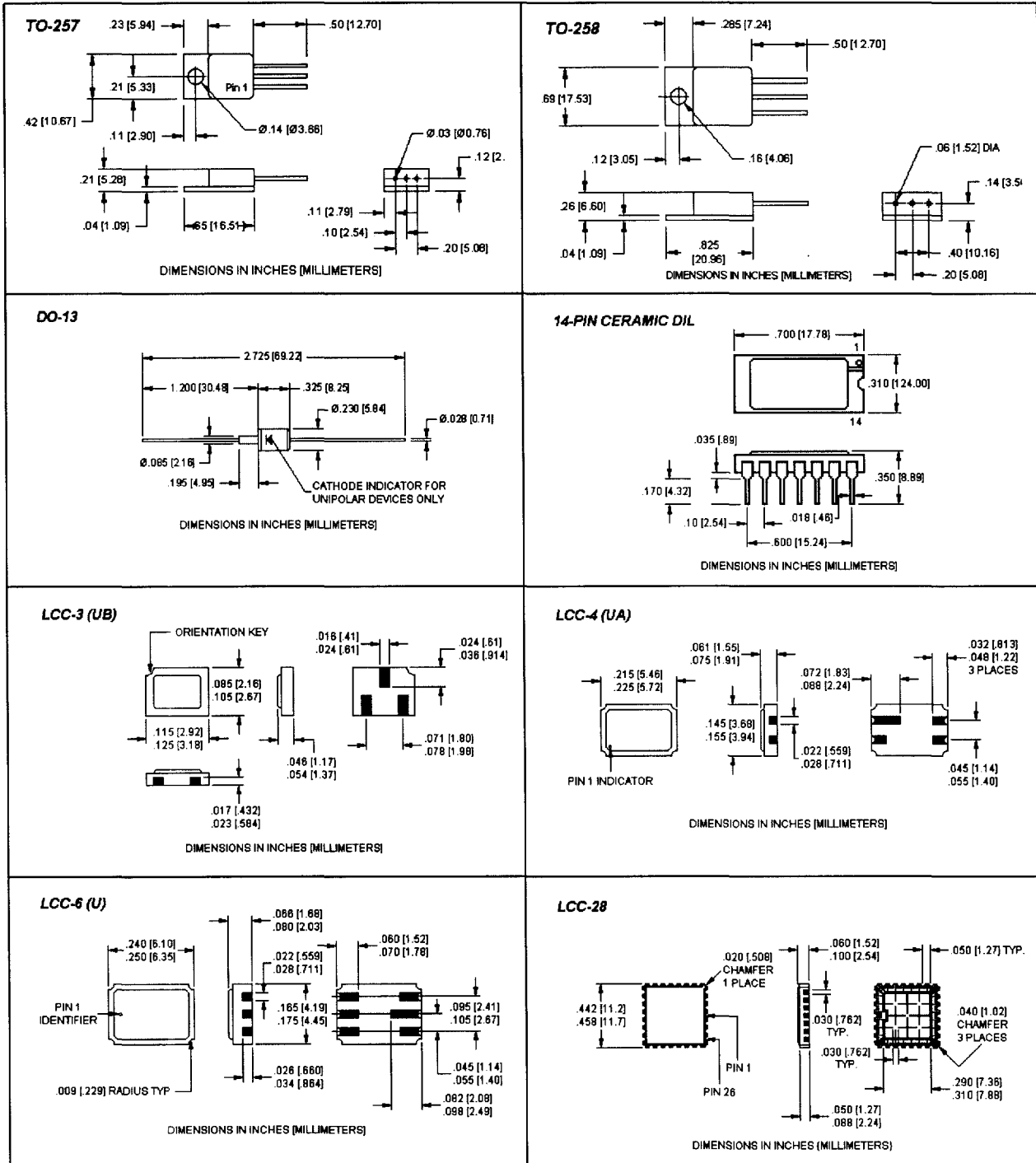
Package Outlines



Package Outlines



Package Outlines



Package Outlines

