

# Section 2: Bipolar Transistors

## General Purpose and Switching Transistors

2

E-Line Switching Transistors ( $P_D = 300\text{mW}$ )

Pinout Details: 1-Collector, 2-Base, 3-Emitter

Type	$V_{CBO}$ V	$V_{CEO}$ V	$I_C$ A	$h_{FE}$		$V_{CE(sat)}$			$f_T$ Min MHz		
				Min	Max	at $I_C$ mA	at $V_{CE}$ V	Max V			
<b>NPN</b>											
ZTX341	100	100	0.1	30	—	2	1	0.5	2	0.1	80
ZTX314	40	15	0.5	40	120	10	1	0.5	100	10	500
MPS2369A	40	15	0.5	40	120	10	1	0.2	10	1	—
ZTX300	25	25	0.2	50	300	10	6	0.35	50	5.0	150
<b>PNP</b>											
ZTX541	-100	-100	-0.1	30	—	-2	-1	-0.5	-2	-0.1	80
ZTX500	-25	-25	-0.2	50	300	-10	-6	-0.35	-50	-5.0	150
ZTX510	-12	-12	-0.2	40	150	-30	-0.5	-0.5	-100	-10	400

E-Line General Purpose Low Noise Transistors ( $P_D = 350\text{mW}$ )

Pinout Details: 1-Collector, 2-Base, 3-Emitter

Type	$V_{CBO}$ V	$V_{CEO}$ B	$I_C$ A	$h_{FE}$			$V_{CE(sat)}$			$f_T$		Noise Figure		
				Min	at $I_C$ mA	at $V_{CE}$ V	Max V	at $I_C$ mA	at $I_B$ mA	Min MHz	$I_C$ mA	Max dB	$I_C$ $\mu\text{A}$	f Hz
<b>NPN</b>														
ZTX384C	45	30	0.2	250	2	5	.025	10	0.5	150	10	4	200	30-15K
<b>PNP</b>														
ZTX214C	-45	-30	-0.2	350	-2	-5	-0.25	-10	-0.5	200	-10	2	-200	30-15K

E-Line

