NTE ELECTRONICS, INC.
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NTE2322
Silicon PNP Transistor
Quad, General Purpose

Absolute Maximum Ratings:

Collector–Emitter Voltage, V_{CEO} 40V
Collector–Base Voltage, V_{CBO} 60V
Emitter–Base Voltage, V_{EBO} 5V
Continuous Collector Current, I_C 600mA
Total Device Dissipation (T_A = +25°C, Each Transistor), P_D 0.65W
Derate Above 25°C . . . . . 6.5mW/°C
Total Device Dissipation (T_A = +25°C, Total Device), P_D 1.9W
Derate Above 25°C . . . . . 19mW/°C
Operating Junction Temperature Range, T_J . . . . . –55° to +125°C
Storage Temperature Range, T_{stg} . . . . . –55° to +125°C
Thermal Reistance, Junction–to–Ambient, R_{thJA} . . . . . 66°C/W

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 10mA, I_B = 0, Note 1	40	–	–	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 10μA, I_E = 0	60	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	5	–	–	V
Collector Cutoff Current	I_{CBO}	V_{CB} = 30V, I_E = 0	–	–	50	nA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 3V, I_E = 0	–	–	50	nA
ON Characteristics (Note 1)						
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 10mA	75	–	–	
		V_{CE} = 10V, I_C = 150mA	100	–	–	
		V_{CE} = 10V, I_C = 300mA	30	–	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 150mA, I_B = 15mA	–	–	0.4	V
		I_C = 300mA, I_B = 30mA	–	–	1.6	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 150mA, I_B = 15mA	–	–	1.5	V
		I_C = 300mA, I_B = 30mA	–	–	2.6	V

Note 1. Pulse test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2%.

Electrical Characteristics (Cont'd): (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Small–Signal Characteristics						
Current Gain–Bandwidth Product	f_T	V_{CE} = 20V, I_C = 50mA, f = 100MHz	200	–	–	MHz
Output Capacitance	C_{obo}	V_{CB} = 10V, I_E = 0, f = 1MHz	–	–	8	pF
Input Capacitance	C_{ibo}	V_{EB} = 2V, I_C = 0, f = 1MHz	–	–	30	pF

Pin Connection Diagram