ELECTRONICS, INC.
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NTE2412
Silicon NPN Transistor
General Purpose, High Voltage Amp,
(Compl to NTE2413)

Description:

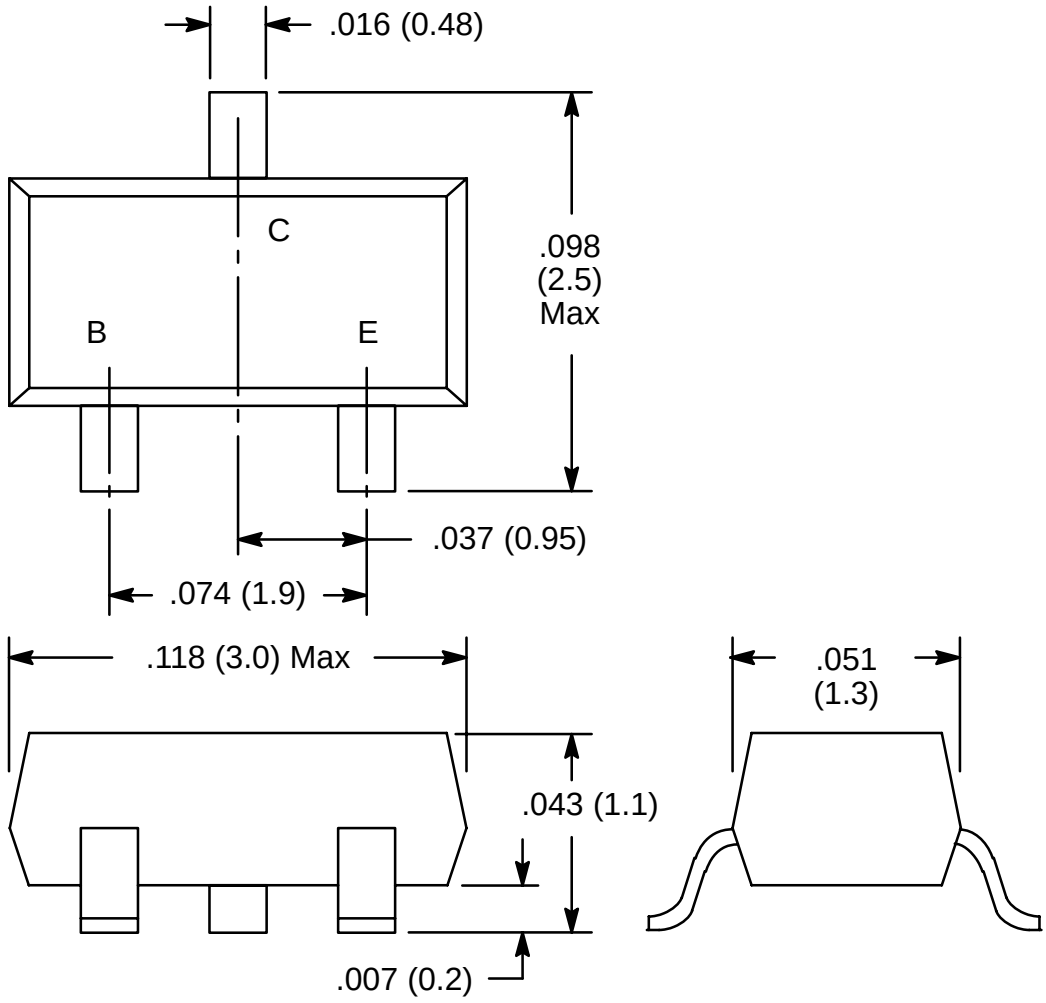
The NTE2412 is a silicon NPN transistor in an SOT–23 type surface mount package designed for use primarily in telephone and professional communication equipment.

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Collector–Base Voltage, V_{CBO} 300V
Collector–Emitter Voltage, V_{CEO} 300V
Emitter–Base Voltage, V_{EBO} 5V
Collector Current, I_C 100mA
Collector Power Dissipation, P_C 200mW
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature range, T_{stg} . . . . . –55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 50μA	300	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 100μA	300	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 50μA	5	–	–	V
Collector Cutoff Current	I_{CBO}	V_{CB} = 200V	–	–	0.5	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 4V	–	–	0.5	μA
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 50mA, I_B = 5mA	–	–	2.0	V
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 10mA	56	–	120	
Transition Frequency	f_T	V_{CE} = 30V, I_E = 10mA, f = 100MHz	50	100	–	MHz
Capacitance	C_{ob}	V_{CB} = 30V, I_E = 0, f = 1MHz	–	3	–	pF


.016 (0.48)
C
.098
(2.5)
Max
B
E
.037 (0.95)
.074 (1.9)
.118 (3.0) Max
.051
(1.3)
.043 (1.1)
.007 (0.2)