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

Description:

The NTE2413 is a silicon PNP transistor in an SOT–23 type surface mount package designed for use primarily in telephone and professional communication equipment.

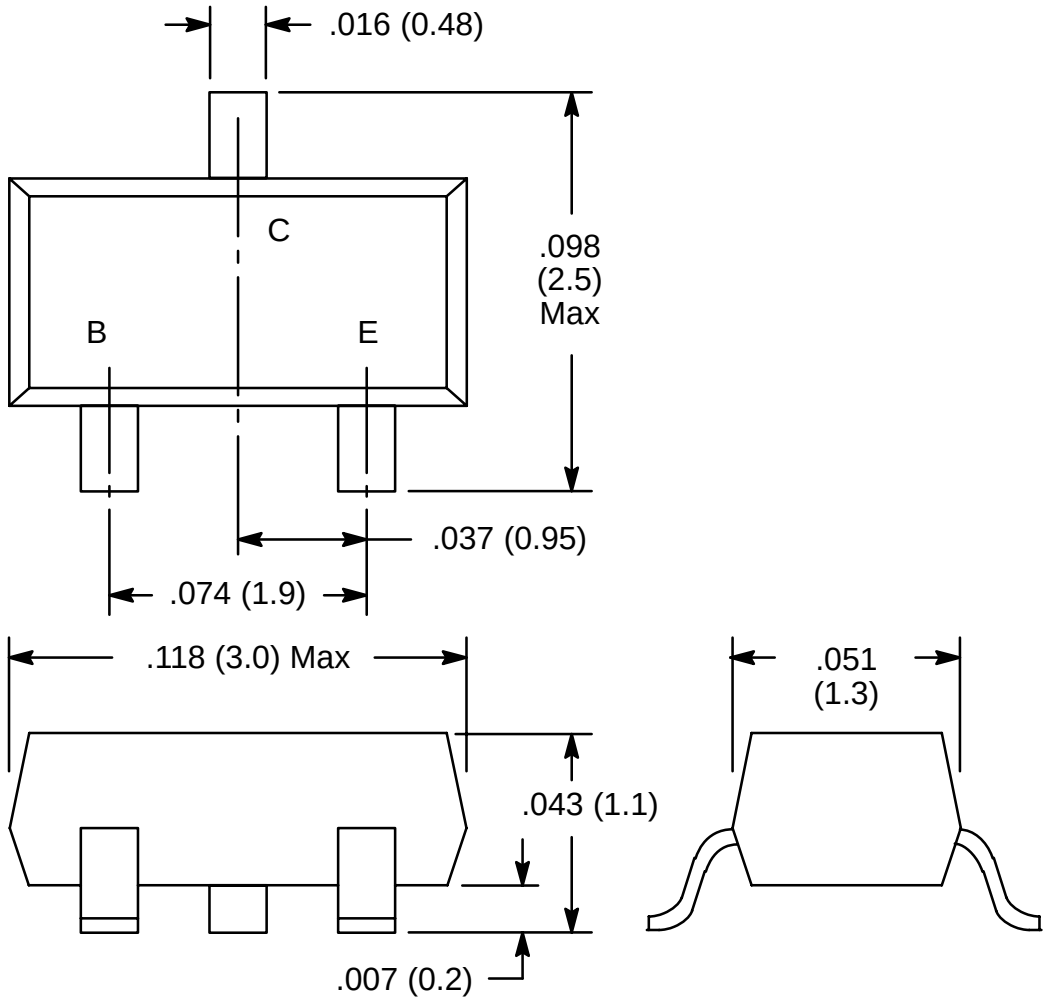
Absolute Maximum Ratings:

Collector–Base Voltage, V_{CBO} 300V
Collector–Emitter Voltage (R_{BE} = 2.7kΩ), V_{CER} 300V
Emitter–Base Voltage, V_{EBO} 5V
Collector Current, I_C
  Continuous 50mA
  Peak 100mA
Total Power Dissipation ($T_A \le +35°C$, Note 1), P_{tot} 310mW
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –65° to +150°C
Thermal Resistance, Junction–to–Tab, R_{thJT} 50K/W
Thermal Resistance, Tab–to–Soldering Points, R_{thTS} 260K/W
Thermal Resistance, Soldering Points–to–Ambient (Note 1), R_{thSA} 60K/W

Note 1. Mounted on a ceramic substrate 2.5cm^2 x 0.7mm.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 200V, I_E = 0	–	–	10	nA
	I_{CER}	V_{CE} = 250V, R_{BE} = 2.7kΩ	–	–	50	nA
		V_{CE} = 200V, R_{BE} = 2.7kΩ, T_J = +150°C	–	–	10	µA
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 30mA, I_B = 5mA	–	–	0.8	V
DC Current Gain	h_{FE}	V_{CE} = 20V, I_C = 25mA	50	–	–	
Transition Frequency	f_T	V_{CE} = 10V, I_E = 10mA, f = 35MHz	60	–	–	MHz
Capacitance	C_{re}	V_{CE} = 30V, I_C = 0, f = 1MHz	–	–	1.6	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)