



**ELECTRONICS, INC.**  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089

## NTE2404 (NPN) & NTE2405 (PNP) Silicon Complementary Transistors Darlington, General Purpose

### Description:

The NTE2404 (NPN) and NTE2405 (PNP) are silicon complementary Darlington transistors in an SOT-23 type surface mount case designed for general-purpose applications.

### Absolute Maximum Ratings:

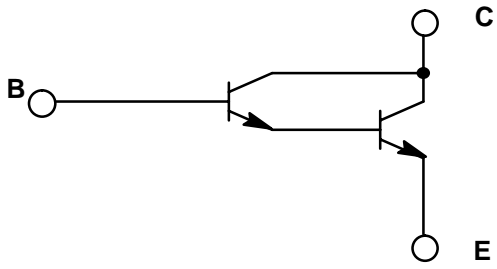
Collector-Emitter Voltage, $V_{CEO}$ .....	30V
Collector-Base Voltage, $V_{CBO}$ .....	40V
Emitter-Base Voltage, $V_{EBO}$ .....	10V
Collector Current, $I_C$	
Continuous .....	300mA
Peak .....	800mA
Base Current, $I_B$ .....	100mA
Total Power Dissipation ( $T_A = +25^\circ\text{C}$ , Note 1), $P_D$ .....	350mW
Operating Junction Temperature, $T_J$ .....	+150°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +150°C
Thermal Resistance, Junction to Ambient (Note 1), $R_{thJA}$ .....	350K/W

Note 1. Mounted on a ceramic substrate of .590 (15mm) x .590 (15mm) x .027 (0.7mm).

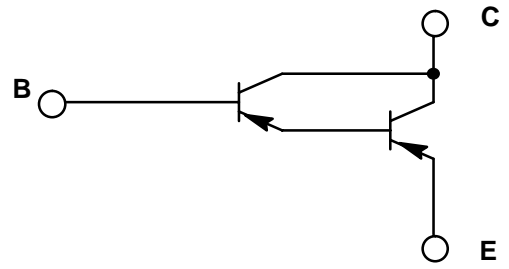
### Electrical Characteristics: ( $T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Current	$I_{CBO}$	$V_{CBO} = 30V$	-	-	100	nA
Emitter-Base Current	$I_{EBO}$	$V_{EB} = 10V$	-	-	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA$	30	-	-	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A$	40	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100nA$	10	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 0.1mA$	-	-	1	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 100mA, I_B = 0.1mA$	-	-	1.5	V
DC Current Gain	h <sub>FE</sub>	$I_C = 1mA, V_{CE} = 5V$	4000	-	-	
		$I_C = 10mA, V_{CE} = 5V$	10000	-	-	
		$I_C = 100mA, V_{CE} = 5V$	20000	-	-	
Transition Frequency	$f_T$	$I_C = 30mA, V_{CE} = 5V, f = 100MHz$	-	220	-	MHz
Collector Capacitance	$C_C$	$I_E = 0, V_{CB} = 30V$	-	3.5	-	pF

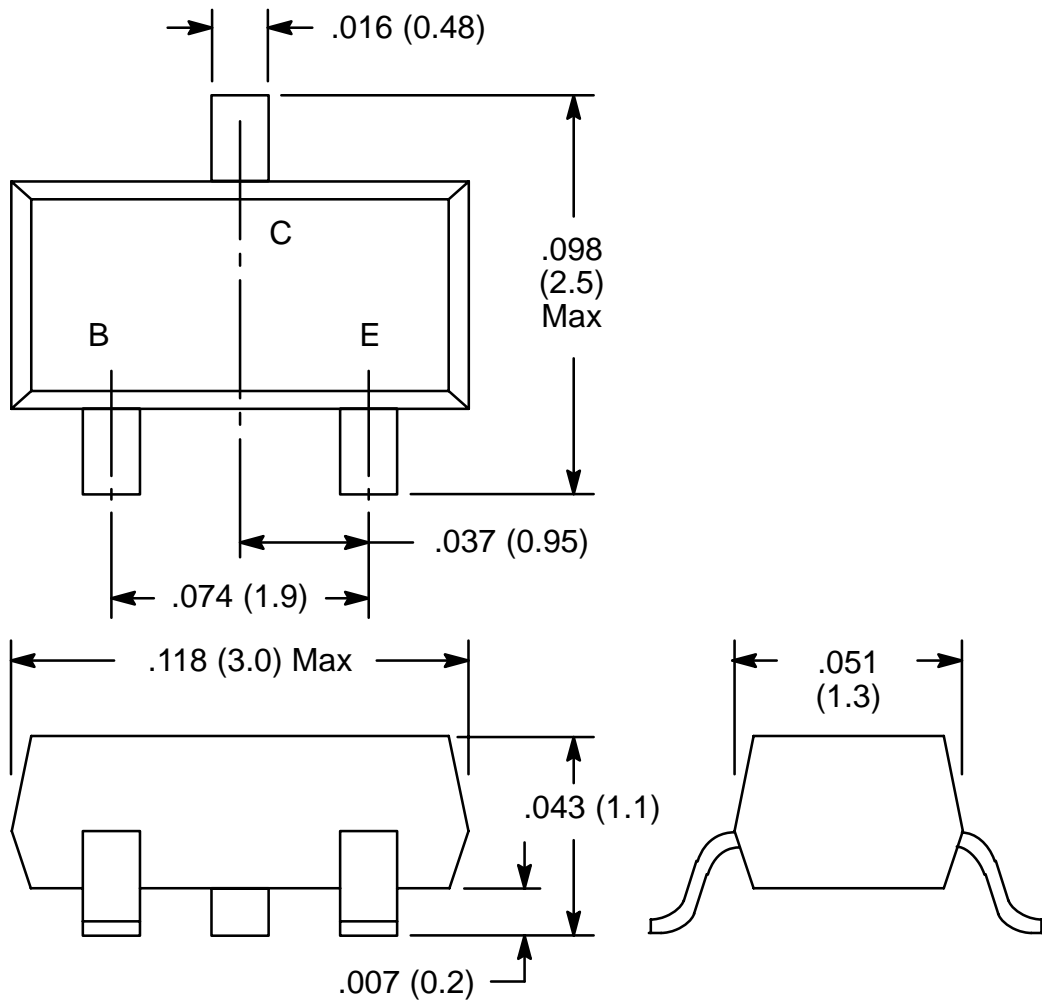
### Schematic Diagram



NPN



PNP



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Darlington Transistors](#) category:*

*Click to view products by [NTE manufacturer](#):*

Other Similar products are found below :

[281287X](#) [SMMBT6427LT1G](#) [2N7371](#) [BDV64B](#) [JANTXV2N6287](#) [028710A](#) [SMMBTA64LT1G](#) [2N6350](#) [2SB1214-TL-E](#)  
[SMMBTA14LT1G](#) [SBSP52T1G](#) [NJVMJD117T4G](#) [Jantx2N6058](#) [2N6353](#) [LB1205-L-E](#) [500-00005](#) [2N6053](#) [NJVMJD112G](#) [Jan2N6350](#)  
[Jantx2N6352](#) [Jantx2N6350](#) [BULN2803LVS](#) [ULN2001N](#) [2SB1383](#) [2SB1560](#) [2SB852KT146B](#) [TIP112TU](#) [TIP122TU](#) [BCV27](#) [MMBTA13-](#)  
[TP](#) [MMBTA14-TP](#) [MMSTA28T146](#) [BSP50H6327XTSA1](#) [KSH122TF](#) [NTE2557](#) [NJVNJD35N04T4G](#) [TIP115](#) [MPSA29-D26Z](#) [MJD127T4](#)  
[FJB102TM](#) [BCV26E6327HTSA1](#) [BCV46E6327HTSA1](#) [BCV47E6327HTSA1](#) [BSP61H6327XTSA1](#) [BU941ZPFI](#) [2SB1316TL](#) [2SD1980TL](#)  
[NTE2350](#) [NTE245](#) [NTE246](#)