

NTE235 Silicon NPN Transistor Final RF Power Output

Description:

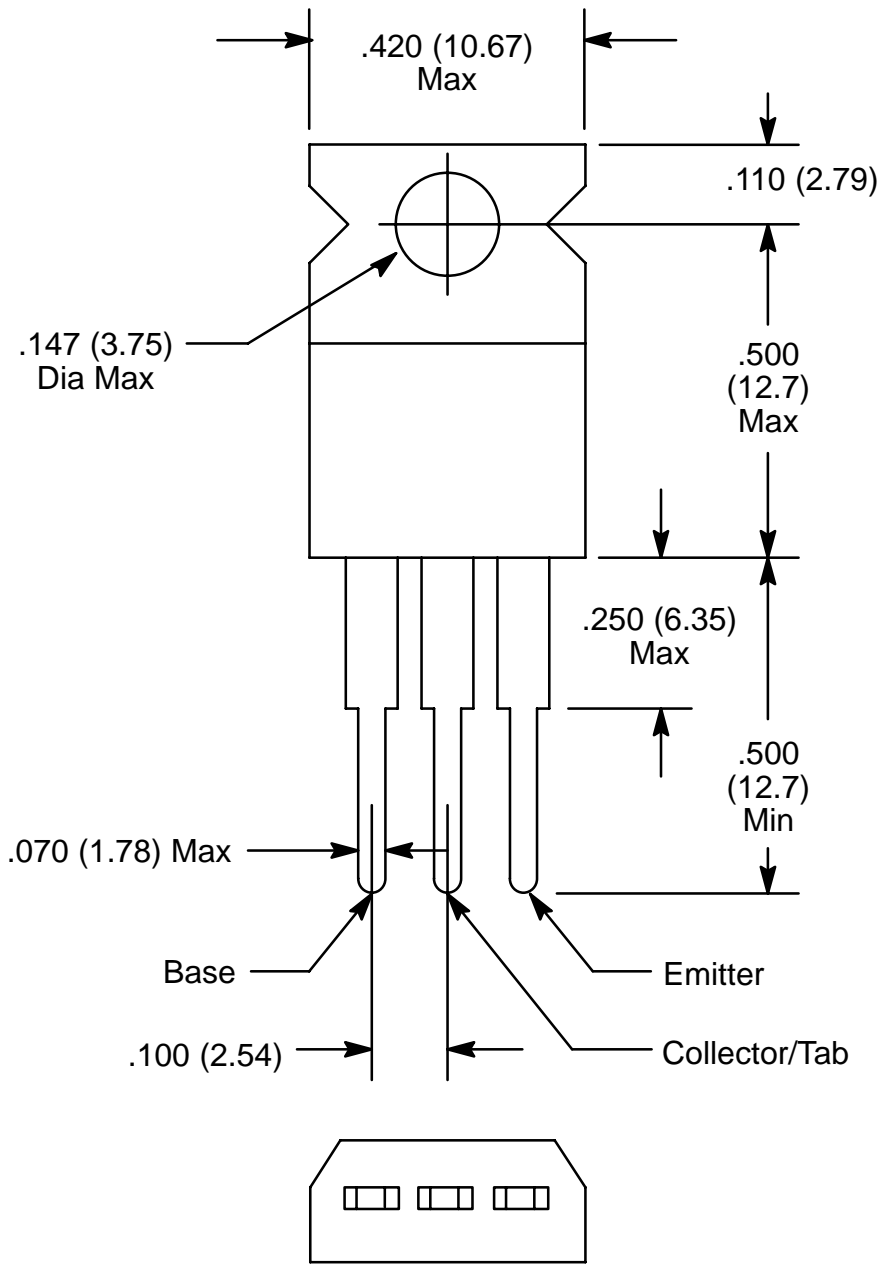
The NTE235 is an NPN silicon transistor in a TO220 type case designed for use in high power output amplifier stages such as citizen band communications equipment.

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Collector–Emitter Voltage ($R_{BE} = 150\Omega$), V_{CER}	75V
Collector–Base Voltage, V_{CBO}	80V
Emitter–Base Voltage, V_{EBO}	5V
Collector Current, I_C	
Continuous	3A
Peak	5A
Collector Dissipation, P_C	
$T_A = +25^\circ\text{C}$	1.2W
$T_C = +50^\circ\text{C}$	10W
Operating Junction Temperature, T_J	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}$, $I_B = 0$	80	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CER}$	$I_C = 1\text{mA}$, $R_{BE} = 150\Omega$	75	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}$, $I_C = 0$	5	–	–	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 40\text{V}$, $I_E = 0$	–	–	10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4\text{V}$, $I_C = 0$	–	–	10	μA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 500\text{mA}$	25	–	200	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1\text{A}$, $I_B = 100\text{mA}$	–	0.15	0.6	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 1\text{A}$, $I_B = 100\text{mA}$	–	0.9	1.2	V
Current Gain–Bandwidth Product	f_T	$V_{CE} = 10\text{V}$, $I_C = 100\text{mA}$	100	150	–	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $f = 1\text{MHz}$	–	45	60	pF
Power Output	P_O	$V_{CC} = 12\text{V}$, $P_{in} = 0.2\text{W}$, $f = 27\text{MHz}$	4.0	–	–	W
Collector Efficiency	η		60	–	–	%



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

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

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)