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## NTE95 Silicon NPN Transistor High Voltage, High Power Switch

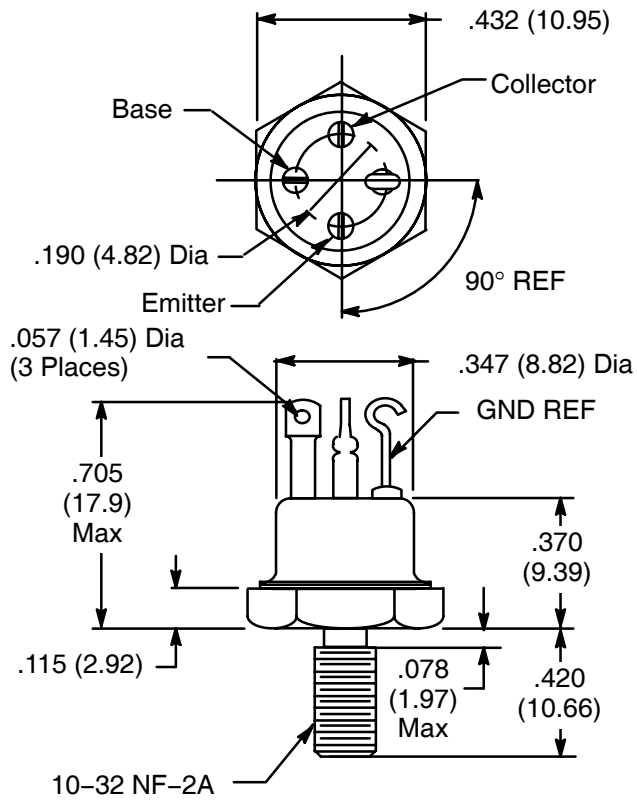
**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Collector-Base Voltage, $V_{CBO}$ .....	250V
Collector-Emitter Voltage, $V_{CEO}$ .....	250V
Emitter-Base Voltage, $V_{EBO}$ .....	6V
Collector Current, $I_C$	
Continuous .....	3A
Peak .....	0.3A
Total Power Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_D$ .....	70W
Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	2.5°C/W
Operating Junction Temperature Range, $T_{j(oper)}$ .....	-65° to +200°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +200°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Sustainin Voltage	$V_{CEO(sus)}$	$I_C = 25\text{mA}$	250	-	-	V
Collector Cutoff Current	$I_{CEO}$	$V_{CE} = 150\text{V}$	-	-	10	$\mu\text{A}$
		$V_{CE} = 200\text{V}$	-	-	0.25	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5\text{V}$	-	-	10	$\mu\text{A}$
		$V_{EB} = 6\text{V}$	-	-	1.0	mA
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 3\text{A}$	15	-	-	
		$V_{CE} = 5\text{V}, I_C = 0.5\text{A}$	90	-	250	
		$T_C = -55^\circ\text{C}$	35	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 3\text{A}, I_B = 0.3\text{A}$	-	-	2.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-	-	2.2	V
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = 5\text{V}, I_C = 3\text{A}$	-	-	2.2	V
Small-Signal Current Gain	$ h_{FE} $	$V_{CE} = 10\text{V}, I_C = 100\text{mA}, f = 20\text{MHz}$	2.0	-	-	
		$I_C = 250\text{mA}, f = 1\text{kHz}$	30	-	-	
Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_C = 0, f = 1\text{MHz}$	-	-	100	pF

T111



T059 – Isolated Collector

