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NTE95 Silicon NPN Transistor High Voltage, High Power Switch

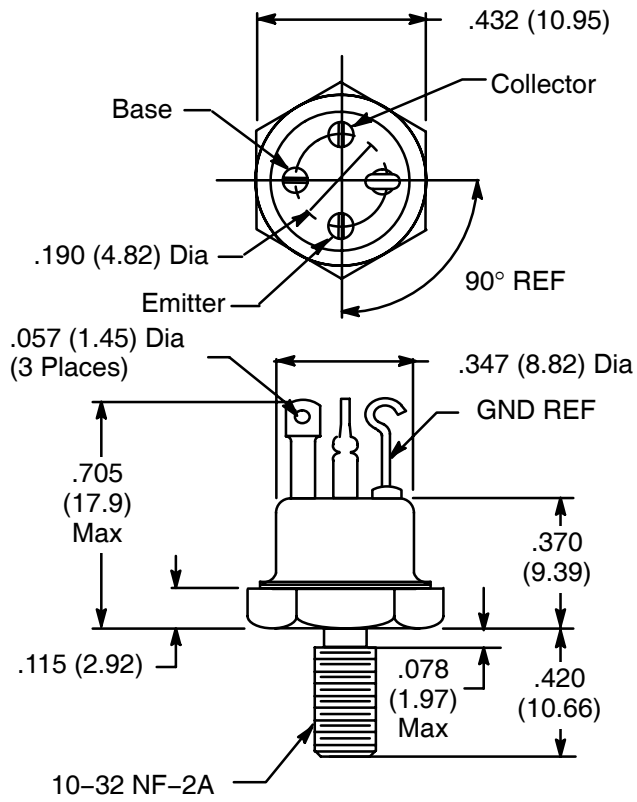
Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

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	μA
		$V_{CE} = 200\text{V}$	-	-	0.25	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}$	-	-	10	μA
		$V_{EB} = 6\text{V}$	-	-	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

