



## NTE2679 Silicon NPN Transistor Power, High Voltage w/Built-In Damper Diode TO220F Type Package

### Features:

- High Breakdown Voltage:  $V_{CBO} = 1500V$  Min
- Wide Area of Safe Operation
- Built-In Damper Diode

### Applications:

- Horizontal Deflection Output for TV or CRT Monitor

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

Collector-Base Voltage, $V_{CBO}$	.....	1500V
Collector-Emitter Voltage, $V_{CEO}$	.....	1500V
Emitter-Base Voltage, $V_{EBO}$	.....	5V
Collector Current, $I_C$		
Continuous .....		6A
Peak .....		9A
Continuous Base Current, $I_B$	.....	3A
Collector Power Dissipation, $P_C$		
$T_A = +25^\circ C$ .....		2W
$T_C = +25^\circ C$ .....		30W
Operating Junction Temperature, $T_J$	.....	+150°C
Storage Temperature Range, $T_{stg}$	.....	-55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 500mA$ , $I_C = 0$	5	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 3A$ , $I_B = 750mA$	-	-	2.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 3A$ , $I_B = 750mA$	-	-	1.5	V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 1000V$ , $I_E = 0$	-	-	50	$\mu A$
		$V_{CB} = 1500V$ , $I_E = 0$	-	-	1.0	mA
DC Current Gain	$h_{FE}$	$I_C = 3A$ , $V_{CE} = 5V$	5	-	12	
Collector-Emitter Diode Forward Voltage	$V_{ECF}$	$I_F = 3A$	-	-	2.0	V
Current Gain Bandwidth Product	$f_T$	$I_C = 100mA$ , $V_{CE} = 10V$ , $f = 0.5MHz$	-	3	-	MHz
Storage Time	$t_{stg}$	Resistive Load $I_C = 3A$ , $I_{B1} = 750mA$ , $I_{B2} = -1.5A$	-	-	5.0	$\mu s$
Fall Time	$t_f$		-	-	0.5	$\mu s$

