

TL/G/10036-6

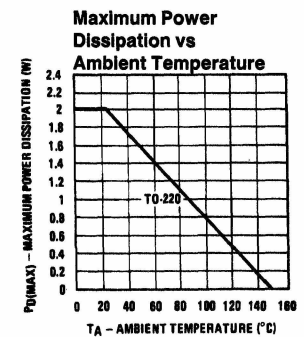
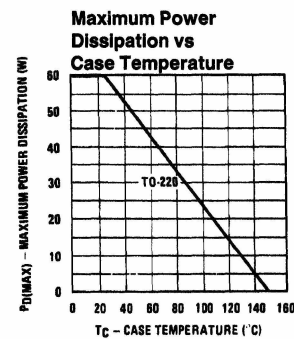
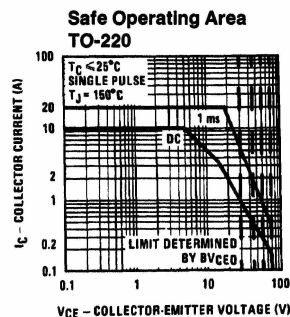
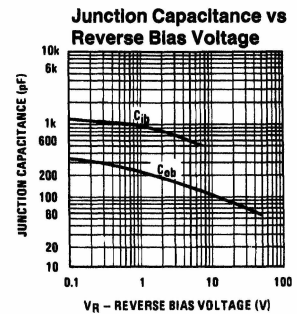
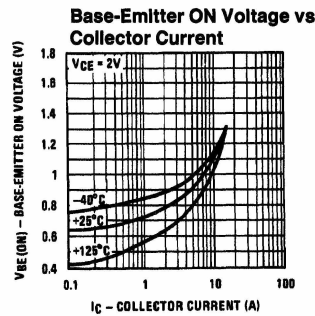
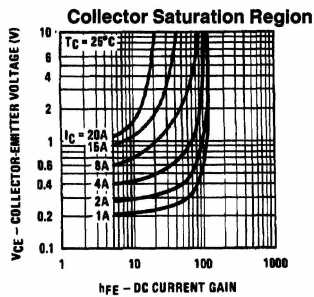
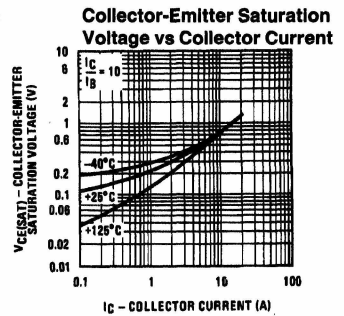
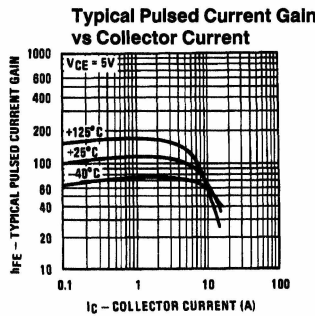
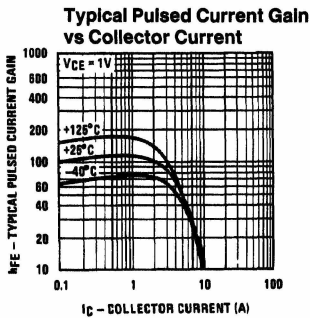
Electrical Characteristics ($T_A = 25^\circ\text{C}$)

Symbol	Conditions	Min	Typ	Max	Units
BV_{CEO}	$I_C = 100 \text{ mA}$ (Note 1)	50		120	V
BV_{CES}	$I_C = 1 \text{ mA}$	75			V
BV_{EBO}	$I_E = 1 \text{ mA}$	5	8		V
I_{CES}	$V_{CE} = 50\text{V}$			5	μA
I_{EBO}	$V_{EB} = 5\text{V}$			5	μA
h_{FE}	$I_C = 30 \text{ mA}$, $V_{CE} = 1\text{V}$	30			
h_{FE}	$I_C = 0.5\text{A}$, $V_{CE} = 1\text{V}$	40		300	
h_{FE}	$I_C = 8\text{A}$, $V_{CE} = 1\text{V}$	10			
$V_{CE(SAT)}$	$I_C = 4\text{A}$, $I_B = 0.4\text{A}$			0.5	V
$V_{BE(SAT)}$	$I_C = 4\text{A}$, $I_B = 0.4\text{A}$			1.1	V
f_t	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{A}$	50			MHz
C_{OB}	$V_{CB} = 10\text{V}$		110		pF
C_{IB}	$V_{EB} = 1\text{V}$		730		pF
t_r t_s t_f }	$I_C = 5\text{A}$, $V_{CE} = 30\text{V}$ $I_{B1} = I_{B2} = 0.5\text{A}$		30 500 60		ns ns ns
$P_{D(max)}$ TO-220	$T_C = 25^\circ\text{C}$	60			W
θ_{JC} TO-220	$T_C = 25^\circ\text{C}$			2.08	$^\circ\text{C}/\text{W}$
θ_{JA} TO-220	$T_A = 25^\circ\text{C}$			62.5	$^\circ\text{C}/\text{W}$
$T_J(max)$	All Plastic Parts	150			$^\circ\text{C}$

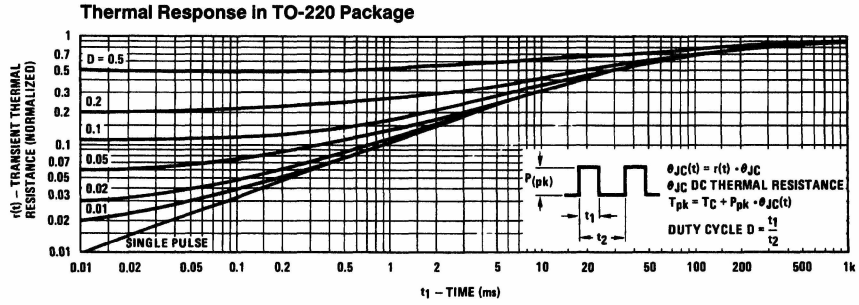
 Note 1: Pulsed measurement = 300 μs pulse width.

This process is available in the following device types.

	V_{CE0} (V), Min	h_{FE}		@ I_C (A)
		Min	Max	
TO-220 (NS Package 57)				
D44H1	30	35		2
D44H2	30	60		2
D44H4	45	35		2
D44H5	45	60		2
D44H7	60	35		2
D44H8	60	60		2
D44H10	80	35		2
D44H11	80	60		2



Process 4Q



TL/G/10036-8