

silicon power transistors

NPN TO-111

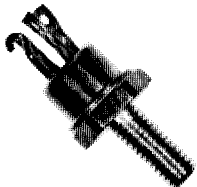
$I_{C(MAX)} = 5 \text{ to } 10 \text{ A}$

$V_{CEO(SUS)} = 50 \text{ to } 350 \text{ V}$

$f_T = 30 \text{ to } 50 \text{ MHz}$

Type #	$V_{CEO(SUS)}$ (Volts)	h_{FE} @ I_C/V_{CE} (Min-Max @ A/V)	$V_{CE(SAT)}$ @ I_C/I_B (V @ A/A)	V_{BE} @ I_C/V_{CE} (V @ A/V)	I_{CEV} @ V_{CE} (mA @ V)	P_D @ $T_C = 100^\circ\text{C}$ (Watts)	θ_{JC} ($^\circ\text{C/W}$)	$I_{S/B}$ @ V_{CE} $t = 1\text{sec}$ (A @ V)	f_T (MHz)	t_{ON} @ I_C/I_B (μs @ A/A)	t_{OFF} @ I_C/I_B (μs @ A/A)	Generic Product	General Information
2N2877	50	20-60@1/2	2@5/5	1.2@1/2	.01@80	30	3.33	2.5@12	30			2N2880 Family. 75 x 100 Mil Chip. Double Diffused Planar Epitaxial Process. Ultrasonically Bonded Leads. Case 710	High Speed, Power Amplifier and Switch. Military Usage.
2N2878	50	40-120@1/2	2@5/5	1.2@1/2	.01@80	30	3.33	2.5@12	50				
2N2879	70	20-60@1/2	2@5/5	1.2@1/2	.01@100	30	3.33	2.5@12	30				
2N2880	70	40-120@1/2	2@5/5	1.2@1/2	.01@100	30	3.33	2.5@12	50				
Typical Values	60	20-120@1/2	1.6@5/5	1@1/2	.01@80	30	3.33	2.5@12	50	1@1/1	2@1/1		
STA8450	60	20-200@5/3	1.5@5/5	2 ³ @5/5	.5@60	33	3.0	1.65@20	40	.4@5/5	1.0@5/5	STA8450 Family. 140 x 140 Mil Chip. Double Epitaxial Process. Ultrasonically Bonded Leads. Case 711	High Voltage, High Speed Power Amplifier and Switch. Military Usage.
STA8451	100	20-200@4/3	1.5@4/4	2 ³ @4/4	1.0@100	33	3.0	1.65@20	40	.4@4/4	1.0@4/4		
STA8452	140	20-200@3/3	1.5@3/3	2 ³ @3/3	1.0@140	33	3.0	1.65@20	40	.4@3/3	1.0@3/3		
Typical Values	120	20-200@3/3	1@3/3	1.7³@3/3	1@120	33	3.0	1.65@20	40	.3@5/5	1@5/5		
NOTE: This product is developmental.													
STA9450	225	20-200@2.5/4	2@2.5/2.5	2.5 ³ @2.5/2.5	.5@225	30	3.3	1.5@20	30	.9@2.5/2.5	2.5@2.5/2.5	STA9450 Family. 140 x 140 Mil Chip. Double Epitaxial Process. Ultrasonically Bonded Leads. Case 711	High Speed Power Switch and Amplifier. Military Usage.
STA9451	300	20-200@2/4	2@2/2	2.5 ³ @2/2	1.0@300	30	3.3	1.5@20	30	.8@2/2	2.5@2/2		
STA9452	350	20-200@1.5/4	2@1.5/1.5	2.5 ³ @1.5/1.5	1.0@350	30	3.3	1.5@20	30	.8@1.5/1.5	2.5@1.5/1.5		
Typical Values	275	20-200@2/4	1@2/2	.8³@2/2	1@275	30	3.3	1.5@20	30	.7@2/2	2@2/2		
NOTE: This product is developmental.													

NOTES:
³ $V_{BE(SAT)}$ @ I_C/I_B (V @ A/A)



NPN TO-111 (isolated collector)

$I_{C(MAX)} = 5 \text{ to } 10 \text{ A}$

$V_{CEO(SUS)} = 60 \text{ to } 350 \text{ V}$

$f_T = 30 \text{ to } 40 \text{ MHz}$

Type #	$V_{CEO(SUS)}$ (Volts)	h_{FE} @ I_C/V_{CE} (Min-Max @ A/V)	$V_{CE(SAT)}$ @ I_C/I_B (V @ A/A)	V_{BE} @ I_C/V_{CE} (V @ A/V)	I_{CEV} @ V_{CE} (mA @ V)	P_D @ $T_C = 100^\circ\text{C}$ (Watts)	θ_{JC} ($^\circ\text{C/W}$)	$I_{S/B}$ @ V_{CE} $t = 1\text{sec}$ (A @ V)	f_T (MHz)	t_{ON} @ I_C/I_B (μs @ A/A)	t_{OFF} @ I_C/I_B (μs @ A/A)	Generic Product	General Information
STA8550	60	20-200@5/3	1.5@5/5	2 ³ @5/5	.5@60	33	3.0	1.65@20	40	.5@5/5	1@5/5	STA8550 Family. 140 x 140 Mil Chip. Double Epitaxial Process. Ultrasonically Bonded Leads. Case 700	High Speed Power Amplifier and Switch. Military Usage.
STA8551	100	20-200@4/3	1.5@4/4	2 ³ @4/4	1.0@100	33	3.0	1.65@20	40	.5@4/4	1@4/4		
STA8552	140	20-200@3/3	1.5@3/3	2 ³ @3/3	1.0@140	33	3.0	1.65@20	40	.4@3/3	1@3/3		
Typical Values	120	20-200@3/3	1@3/3	1.8³@3/3	1@120	33	3.0	1.65@20	40	.3@5/5	1@5/5		
NOTE: This product is developmental.													
STA9550	225	20-200@2.5/4	2@2.5/2.5	2.5 ³ @2.5/2.5	.5@225	30	3.3	1.5@20	30	.8@2.5/2.5	2.5@2.5/2.5	STA9550 Family. 140 x 140 Mil Chip. Double Epitaxial Process. Ultrasonically Bonded Leads. Case 700	High Voltage, High Speed Power Amplifier and Switch. Military Usage.
STA9551	300	20-200@2/4	2@2/2	2.5 ³ @2/2	1.0@300	30	3.3	1.5@20	30	.7@2/2	2.5@2/2		
STA9552	350	20-200@1.5/4	2@1.5/1.5	2.5 ³ @1.5/1.5	1.0@350	30	3.3	1.5@20	30	.7@1.5/1.5	2.5@1.5/1.5		
Typical Values	275	20-200@2/4	1@2/2	1.8³@2/2	1@275	30	3.3	1.5@20	30	.7@2/2	2@2/2		
NOTE: This product is developmental.													

³ $V_{BE(SAT)}$ @ I_C/I_B (V @ A/A)