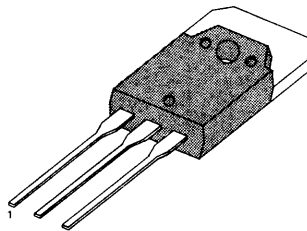


COLOR TV HORIZONTAL OUTPUT
APPLICATIONS (DAMPER DIODE BUILT IN)HIGH Collector-Base Voltage $V_{CBO} = 1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	1500	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	2.5	A
Collector Current (Peak)	I_C	10	A
Collector Dissipation ($T_c = 25^\circ C$)	P_C	80	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ C$

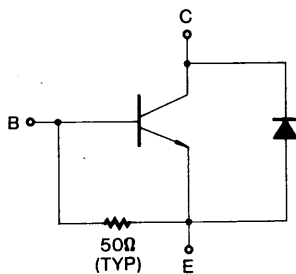
TO-3P



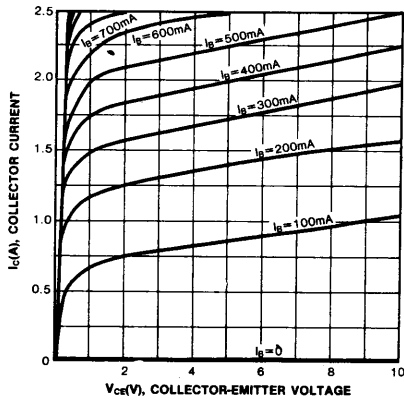
1. Base 2. Collector 3. Emitter

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

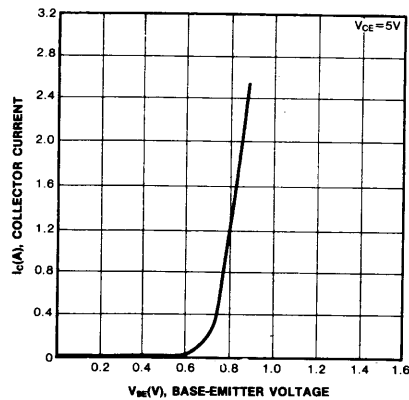
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	40		130	mA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 0.5A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.6A$			8	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 0.6A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 0.5A$		3		MHz
Damper Diode Turn On Voltage	V_f	$I_f = 2.5A$			2	V
Fall Time	t_f	$I_C = 2A, I_{B1} = 0.6A$ $I_{B2} = -1.2A, V_{CC} = 200V$ $RL = 100\Omega$			0.4	μS



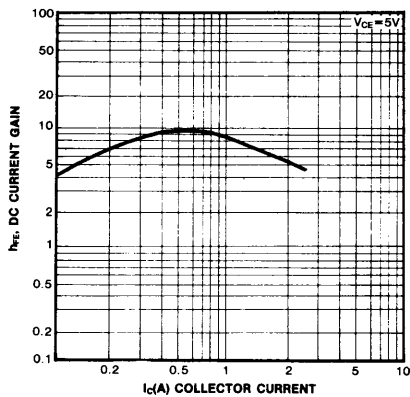
STATIC CHARACTERISTIC



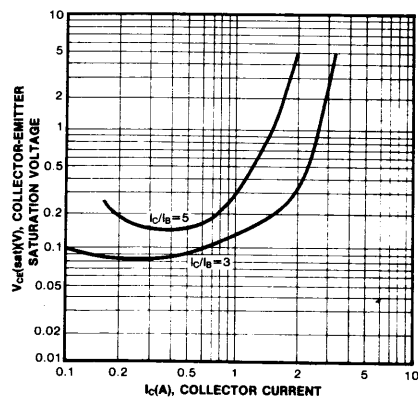
BASE-EMITTER ON VOLTAGE



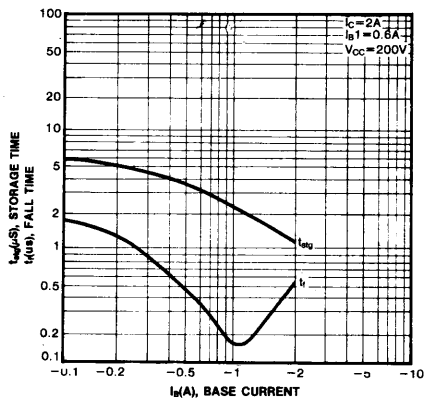
DC CURRENT GAIN



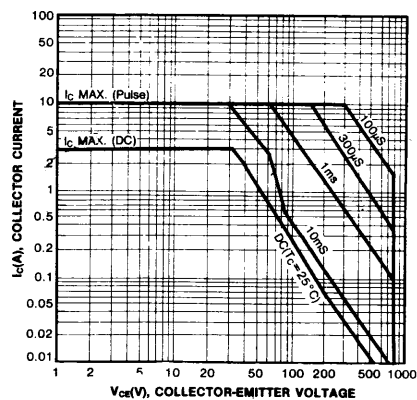
COLLECTOR-EMITTER SATURATION VOLTAGE



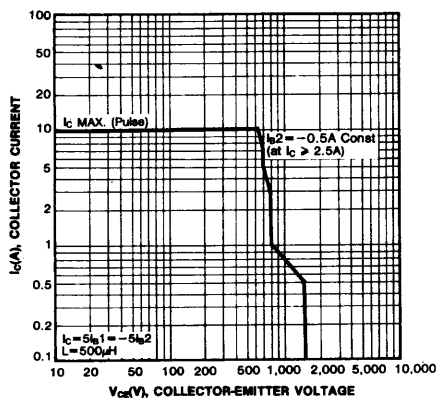
TURN ON TIME



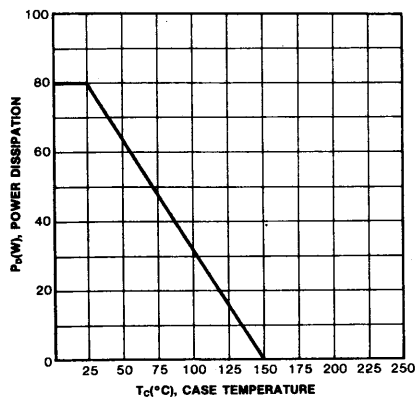
SAFE OPERATING AREA



REVERSE BIAS SAFE OPERATING AREA



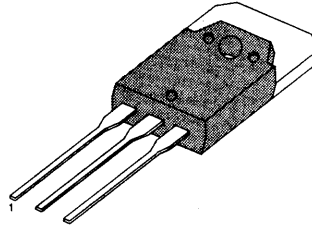
POWER DERATING



COLOR TV HORIZONTAL OUTPUT
APPLICATIONS (DAMPER DIODE BUILT IN)HIGH Collector-Base Voltage $V_{CB0} = 1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	1500	V
Collector-Emitter Voltage	V_{CE0}	800	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	3.5	A
Collector Current (Peak)	I_{Cp}	10	A
Collector Dissipation ($T_c = 25^\circ C$)	P_C	80	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ C$

TO-3P

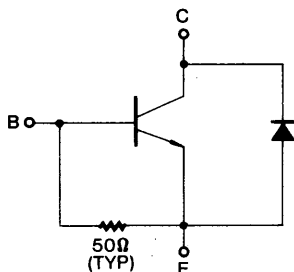


1. Base 2. Collector 3. Emitter

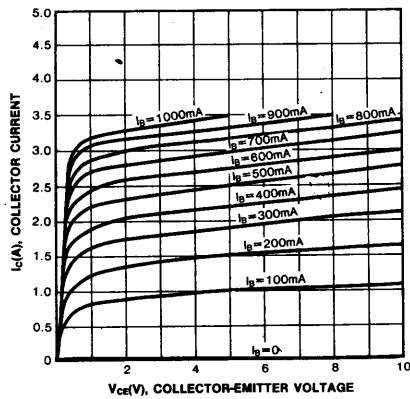
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ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

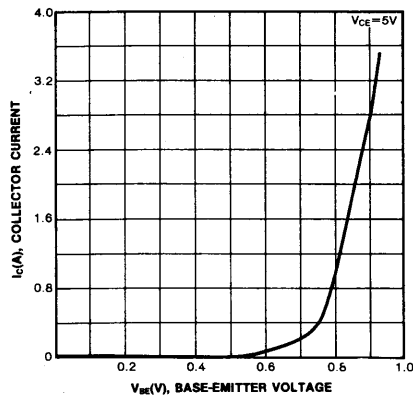
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CB0}	$V_{CB} = 800V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EB0}	$V_{EB} = 4V, I_C = 0$	40		130	mA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 0.5A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2.5A, I_B = 0.8A$			8	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2.5A, I_B = 0.8A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 0.5A$		3	-	MHz
Damper Diode Turn On Voltage	V_f	$I_f = 3.5A$			2	V
Fall Time	t_f	$I_C = 3A, I_{B1} = 0.8A$ $I_{B2} = -1.6A, V_{CC} = 200V$ $R_L = 66.7\Omega$			0.4	μS



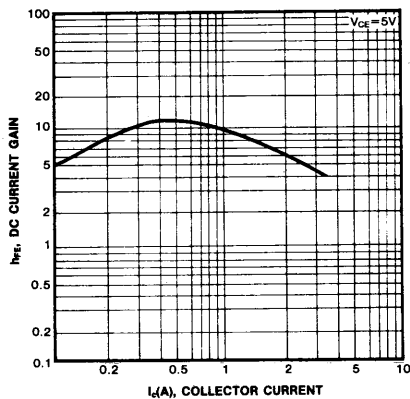
STATIC CHARACTERISTIC



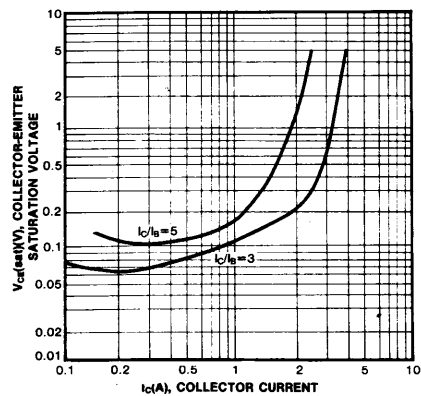
BASE-EMITTER ON VOLTAGE



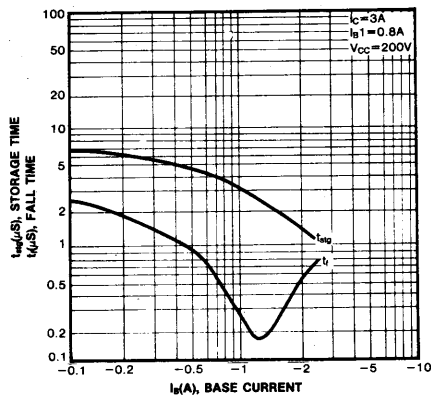
DC CURRENT GAIN



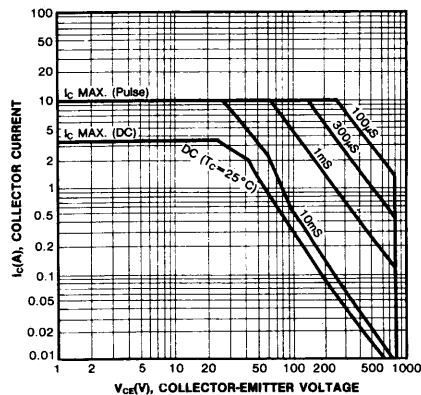
COLLECTOR-EMITTER SATURATION VOLTAGE

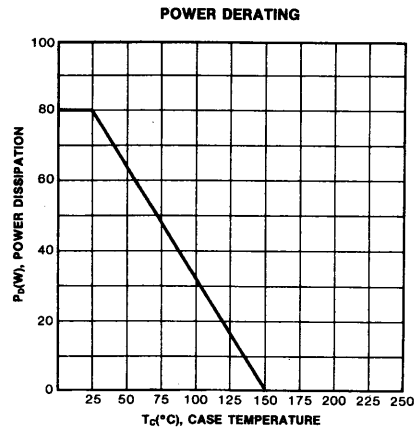
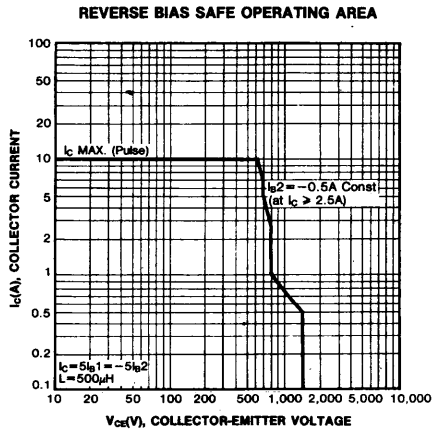


TURN ON TIME



SAFE OPERATING AREAS

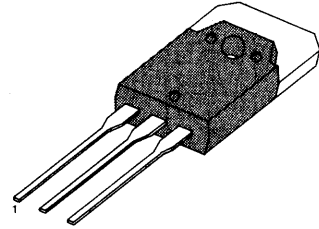




COLOR TV HORIZONTAL OUTPUT
APPLICATIONS (DAMPER DIODE BUILT IN)HIGH Collector-Base Voltage $V_{CBO}=1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	1500	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	5	A
Collector Current (Peak)	I_C	16	A
Collector Dissipation ($T_C=25^\circ C$)	P_C	120	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	$-55\sim 150$	$^\circ C$

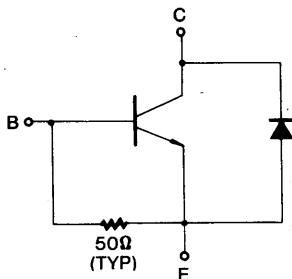
TO-3P



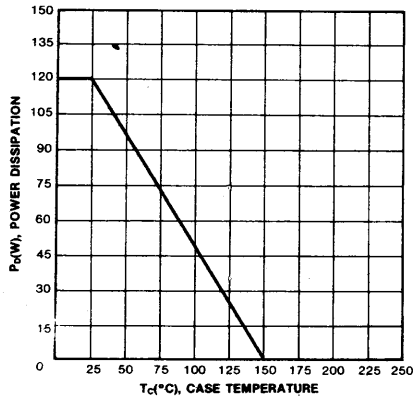
1. Base 2. Collector 3. Emitter

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

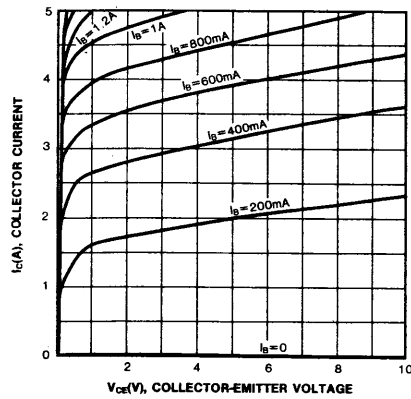
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=800V, I_E=0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V, I_C=0$	40		130	mA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=1A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=0.8A$			5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4A, I_B=0.8A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE}=10V, I_C=1A$		3		MHz
Damper Diode Turn On Voltage	V_f	$I_f=5A$			2	V
Fall Time	t_f	$I_C=4A, I_{B1}=0.8A$ $I_{B2}=-1.6A, V_{CC}=200V$ $RL=50\Omega$			0.4	μS



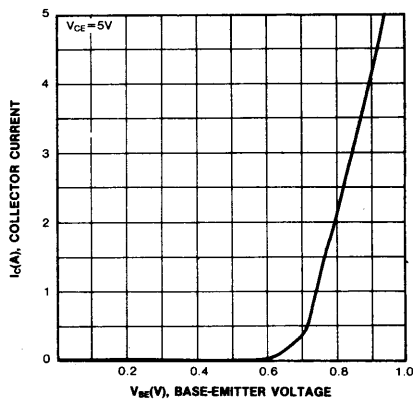
POWER DERATING



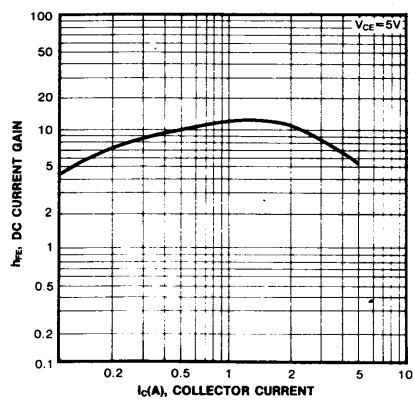
STATIC CHARACTERISTIC



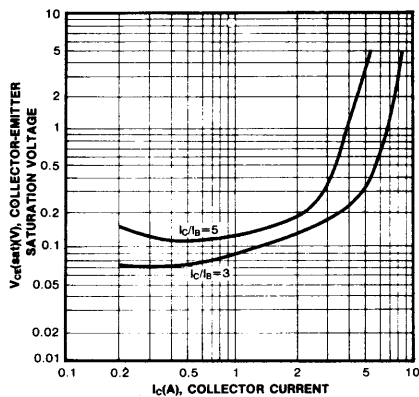
BASE-EMITTER ON VOLTAGE



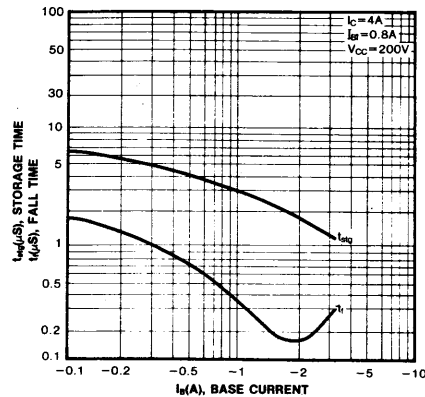
DC CURRENT GAIN

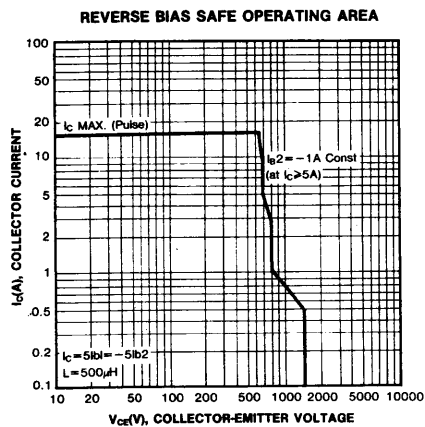
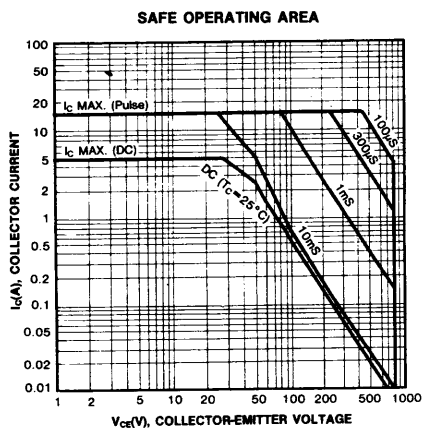


COLLECTOR-EMITTER SATURATION VOLTAGE



TURN ON TIME

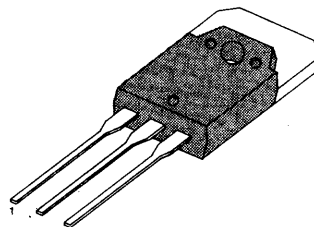




COLOR TV HORIZONTAL OUTPUT
APPLICATIONS (DAMPER DIODE BUILT IN)HIGH Collector-Base Voltage $V_{CB0}=1500\text{ V}$ ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	1500	V
Collector-Emitter Voltage	V_{CE0}	800	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	6	A
Collector Current (Peak)	I_C	16	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	120	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-55\sim 150$	$^\circ\text{C}$

TO-3P

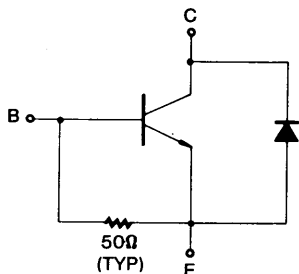


1. Base 2. Collector 3. Emitter

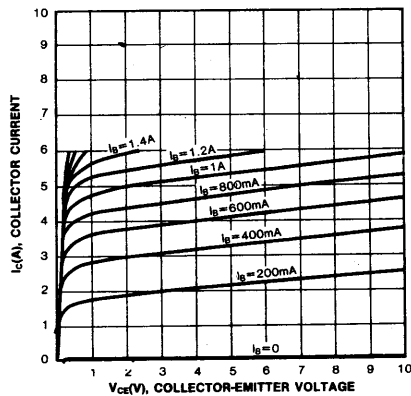
3

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

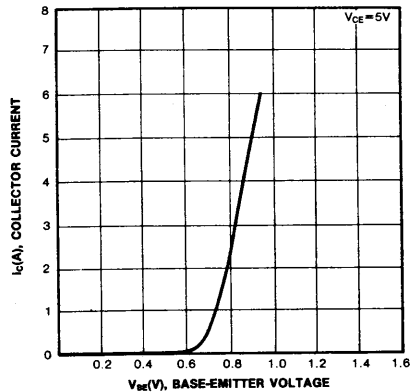
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CB0}	$V_{CB}=800\text{V}, I_E=0$			10	μA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=4\text{V}, I_C=0$	40		130	mA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}, I_C=1\text{A}$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5\text{A}, I_B=1\text{A}$			5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=5\text{A}, I_B=1\text{A}$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE}=10\text{V}, I_C=1\text{A}$		3		MHz
Damper Diode Turn On Voltage	V_f	$I_f=6\text{A}$			2	V
Fall Time	t_f	$I_C=5\text{A}, I_B1=1\text{A}$ $I_B2=-2\text{A}, V_{CC}=200\text{V}$ $RL=40\Omega$			0.4	μs



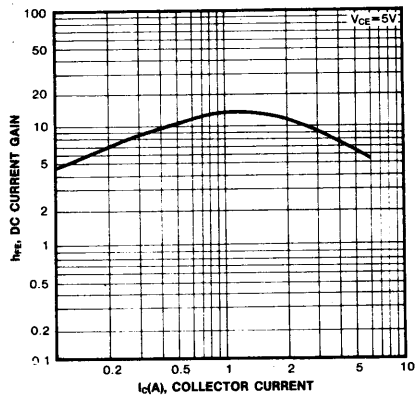
STATIC CHARACTERISTIC



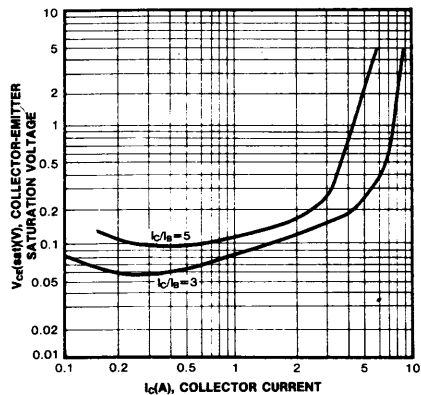
BASE-EMITTER ON VOLTAGE



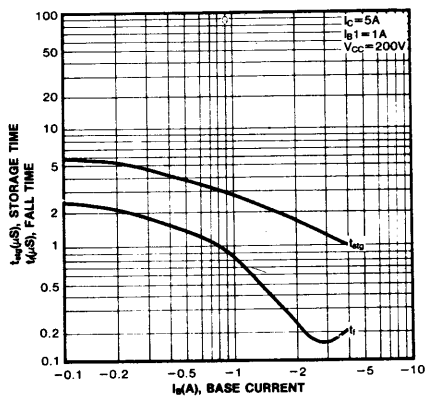
DC CURRENT GAIN



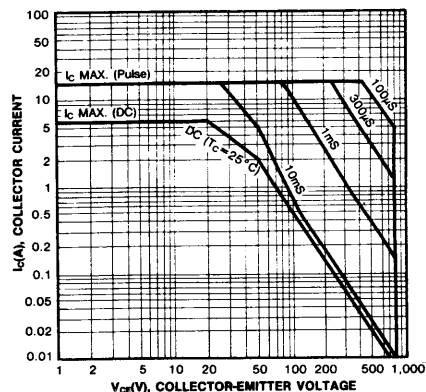
COLLECTOR-EMITTER SATURATION VOLTAGE

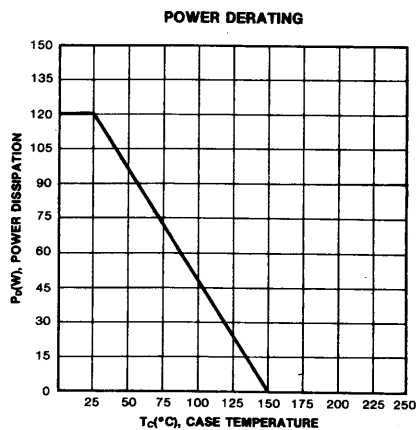
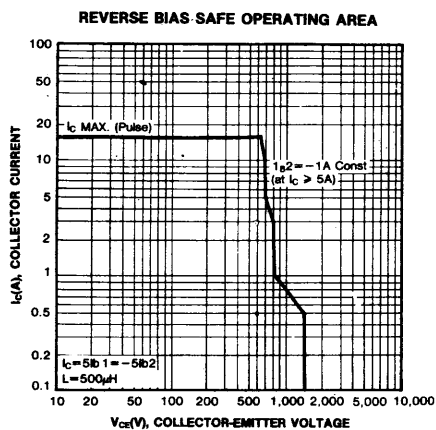


TURN ON TIME



SAFE OPERATING AREA

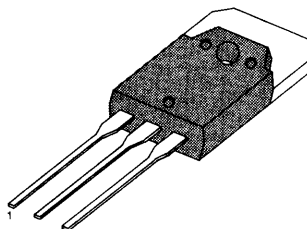




COLOR TV HORIZONTAL OUTPUT
APPLICATIONSHIGH Collector-Base Voltage $V_{CBO} = 1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	1500	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	2.5	A
Collector Current (Peak)	I_C	10	A
Collector Dissipation ($T_C = 25^\circ C$)	P_C	80	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ C$

TO-3P

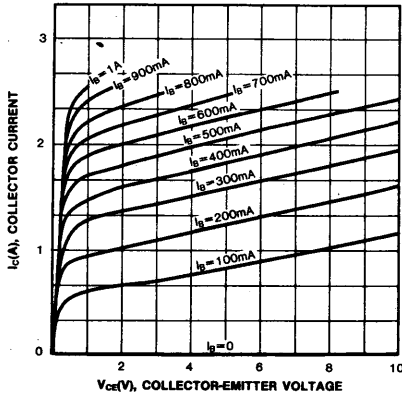


1. Base 2. Collector 3. Emitter

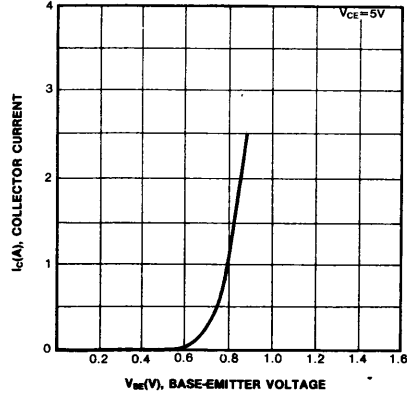
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1	mA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 0.5A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.6A$			8	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 0.6A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 0.5A$		3		MHz
Fall Time	t_f	$I_C = 2A, I_{B1} = 0.6A$ $I_{B2} = -1.2A, V_{CC} = 200V$ $R_L = 100\Omega$			0.4	μS

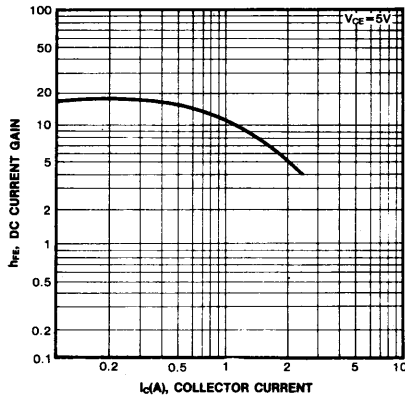
STATIC CHARACTERISTIC



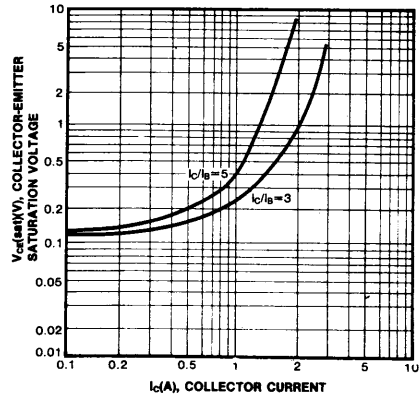
BASE-EMITTER ON VOLTAGE



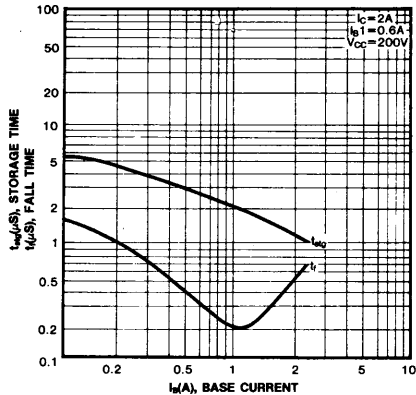
DC CURRENT GAIN



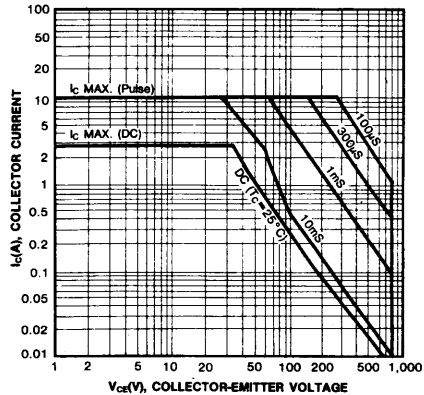
COLLECTOR-EMITTER SATURATION VOLTAGE

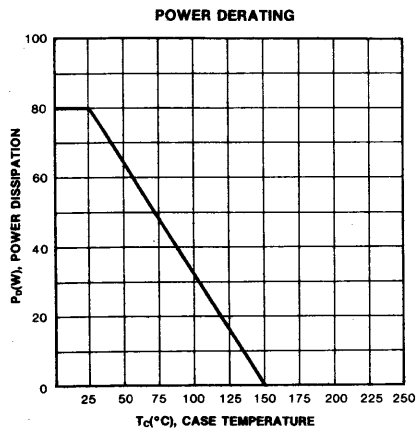
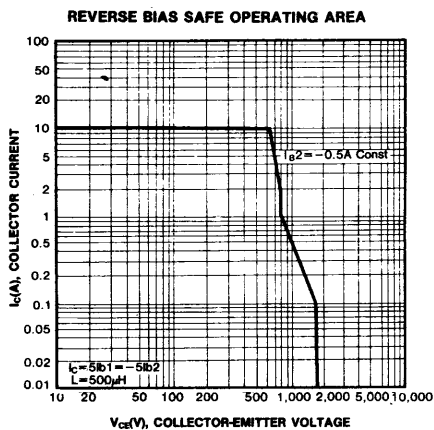


TURN ON TIME



SAFE OPERATING AREA

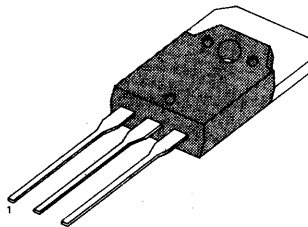




COLOR TV HORIZONTAL OUTPUT
APPLICATIONSHIGH Collector-Base Voltage $V_{CB0}=1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	1500	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	3.5	A
Collector Current (Peak)	I_C	10	A
Collector Dissipation ($T_c=25^\circ C$)	P_C	80	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55~150	$^\circ C$

TO-3P



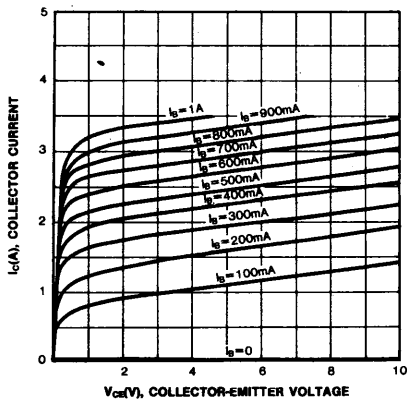
1. Base 2. Collector 3. Emitter

3

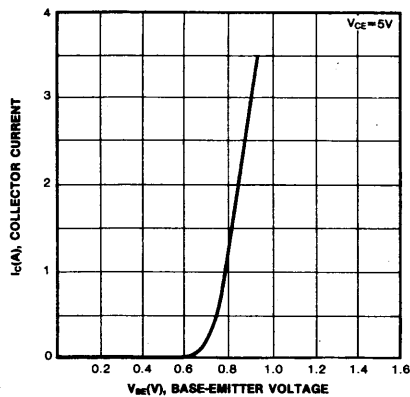
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=800V, I_E=0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5V, I_C=0$			1	mA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=0.5A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2.5A, I_B=0.8A$			8	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2.5A, I_B=0.8A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE}=10V, I_C=0.5A$		3		MHz
Fall Time	t_f	$I_C=3A, I_B1=0.8A$ $I_B2=-1.6A, V_{CC}=200V$ $RL=66.7\Omega$			0.4	μS

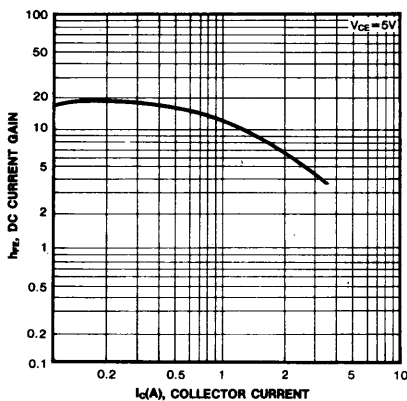
STATIC CHARACTERISTIC



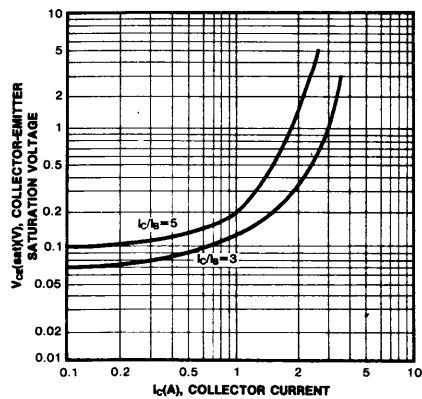
BASE-EMITTER ON VOLTAGE



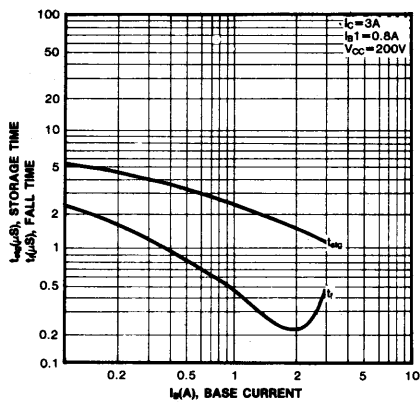
DC CURRENT GAIN



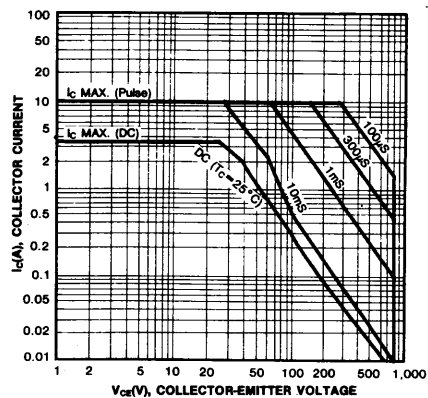
COLLECTOR-EMITTER SATURATION VOLTAGE

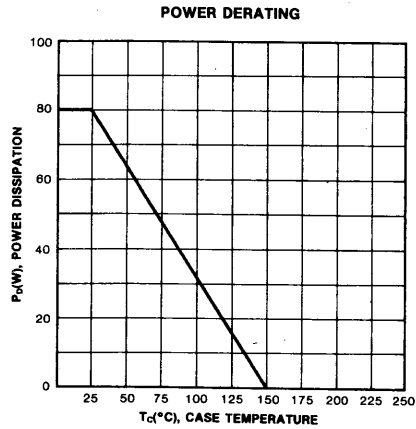
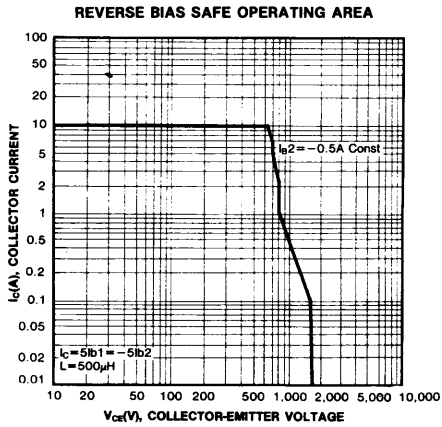


TURN ON TIME



SAFE OPERATING AREA

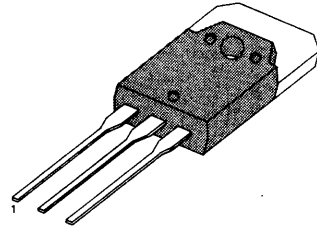




COLOR TV HORIZONTAL OUTPUT
APPLICATIONSHIGH Collector-Base Voltage $V_{CB0} = 1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	1500	V
Collector-Emitter Voltage	V_{CE0}	800	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	5	A
Collector Current (Peak)	I_{Cp}	16	A
Collector Dissipation ($T_C = 25^\circ C$)	P_C	120	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55~150	$^\circ C$

TO-3P

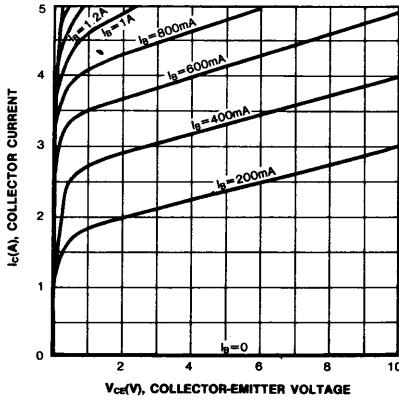


1. Base 2. Collector 3. Emitter

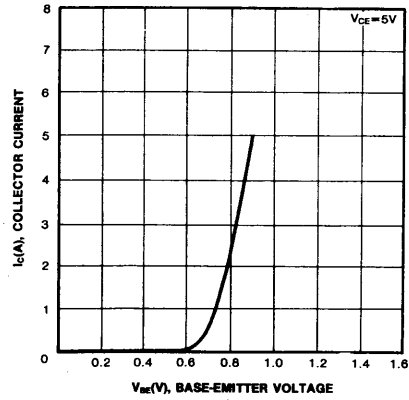
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1	mA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 1A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4A, I_B = 0.8A$			5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 4A, I_B = 0.8A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 1A$		3		MHz
Fall Time	t_f	$I_C = 4A, I_{B1} = 0.8A$ $I_{B2} = -1.6A, V_{CC} = 200V$ $R_L = 50\Omega$			0.4	μS

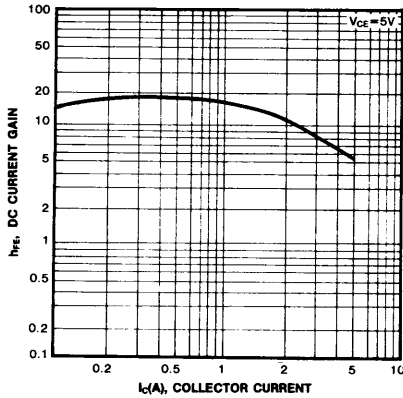
STATIC CHARACTERISTIC



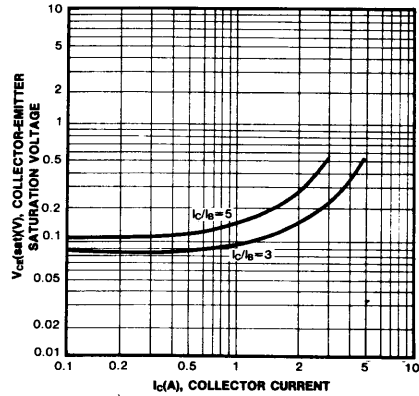
BASE-EMITTER ON VOLTAGE



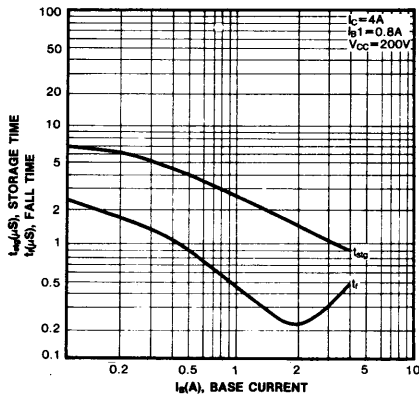
DC CURRENT GAIN



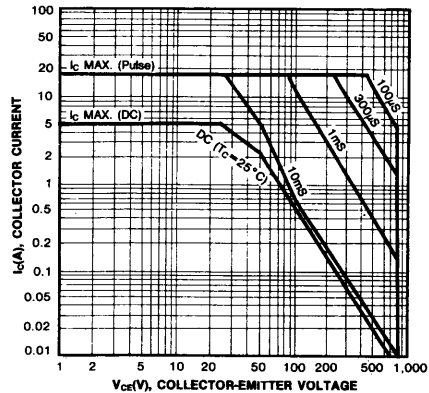
COLLECTOR-EMITTER SATURATION VOLTAGE



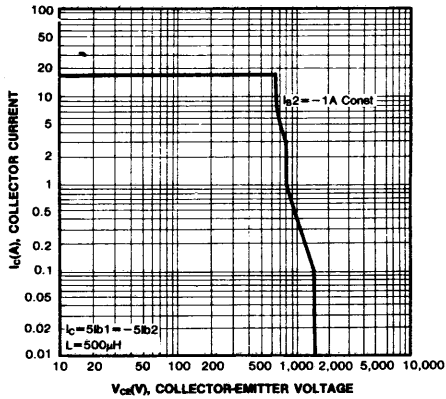
TURN ON TIME



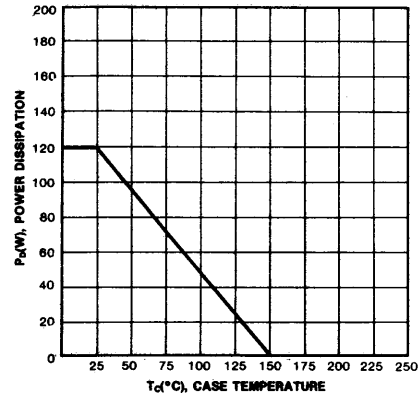
SAFE OPERATING AREA



REVERSE BIAS SAFE OPERATING AREA



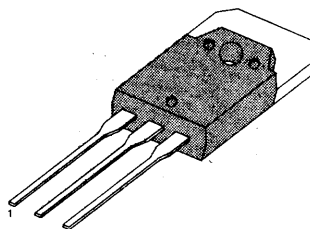
POWER DERATING



COLOR TV HORIZONTAL OUTPUT
APPLICATIONSHigh Collector-Base Voltage $V_{CB0} = 1500V$ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	1500	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	6	A
Collector Current (Peak)	I_{Cp}	16	A
Collector Dissipation ($T_C = 25^\circ C$)	P_C	120	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ C$

TO-3P



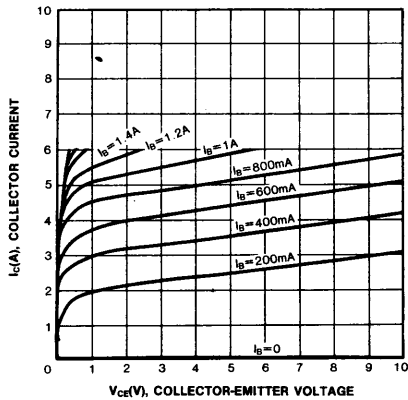
1. Base 2. Collector 3. Emitter

3

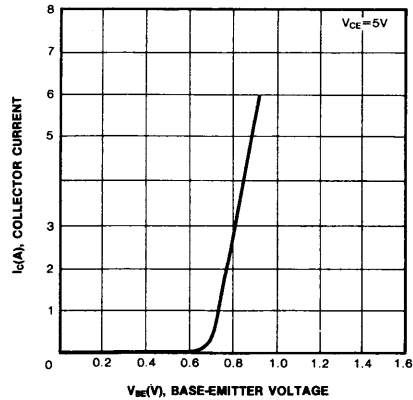
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1	mA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 1A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 5A, I_B = 1A$			5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 5A, I_B = 1A$			1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 1A$		3		MHz
Fall Time	t_f	$I_C = 5A, I_B = 1A$ $I_{B2} = -2A, R_L = 40\Omega$			0.4	μS

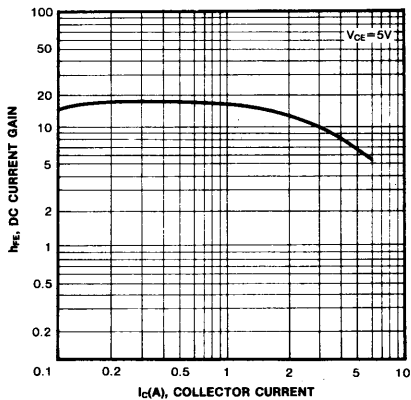
STATIC CHARACTERISTIC



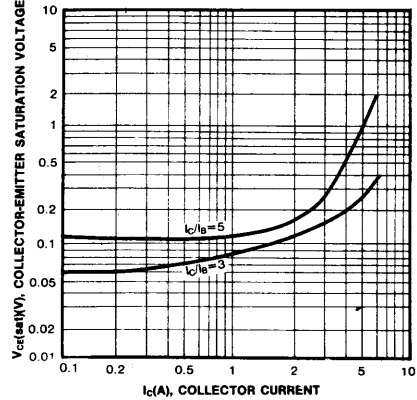
BASE-EMITTER ON VOLTAGE



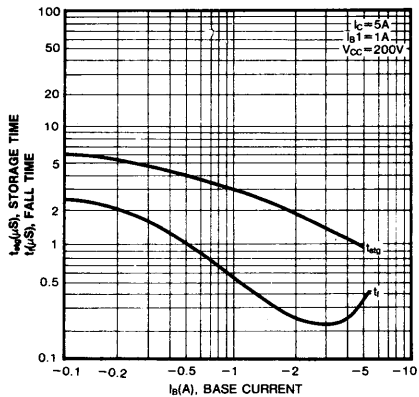
DC CURRENT GAIN



COLLECTOR-EMITTER SATURATION VOLTAGE



TURN ON TIME



SAFE OPERATING AREA

