

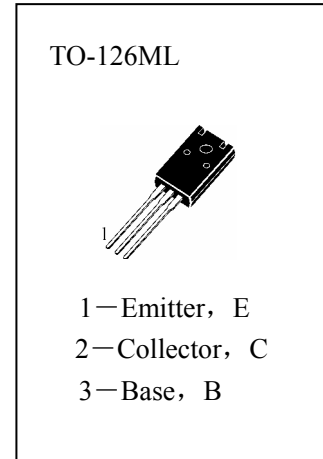
# H3953

## APPLICATIONS

High-definition CRT display video output, wide-band amplifier.

## ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

T <sub>stg</sub>	—Storage Temperature	..... -55~150°C
T <sub>j</sub>	—Junction Temperature	..... 150°C
P <sub>C</sub>	—Collector Dissipation (T <sub>c</sub> =25°C)	..... 8W
P <sub>C</sub>	—Collector Dissipation (T <sub>A</sub> =25°C)	..... 1.3W
V <sub>CBO</sub>	—Collector-Base Voltage	..... 120V
V <sub>CEO</sub>	—Collector-Emitter Voltage	..... 120V
V <sub>EBO</sub>	—Emitter-Base Voltage	..... 3V
I <sub>C</sub>	—Collector Current	.....200mA



## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	120			V	I <sub>C</sub> =10 μ A, I <sub>E</sub> =0
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	120			V	I <sub>C</sub> =1mA, I <sub>B</sub> =0
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	3			V	I <sub>E</sub> =100 μ A, I <sub>C</sub> =0
I <sub>CBO</sub>	Collector Cut-off Current			0.1	μ A	V <sub>CB</sub> =80V, I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter Cut-off Current			1	μ A	V <sub>EB</sub> =2V, I <sub>C</sub> =0
h <sub>FE</sub>	DC Current Gain	40		200		V <sub>CE</sub> =10V, I <sub>C</sub> =10mA
V <sub>CE(sat)</sub>	Collector- Emitter Saturation Voltage			1	V	I <sub>C</sub> =30mA, I <sub>B</sub> =3mA
f <sub>t</sub>	Current Gain-Bandwidth Product		400		MHz	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA,
C <sub>ob</sub>	Output Capacitance		2.1		pF	V <sub>CB</sub> =30V, f=1MHz

## h<sub>FE</sub> Classification

C	D	E
40—80	60—120	100—200