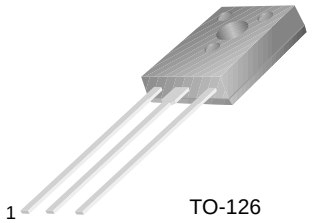
FAIRCHILD
SEMICONDUCTOR TM

KSC2258/2258A

High Voltage General Amplifier
TV Video Output Amplifier

- High BV_{CEO}



TO-126

1. Emitter 2.Collector 3.Base

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage		
	: KSC2258	250	V
	: KSC2258A	300	V
V_{CEO}	Collector-Emitter Voltage		
	: KSC2258	250	V
	: KSC2258A	300	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	100	mA
I_{CP}	Collector Current (Pulse)	150	mA
P_C	Collector Dissipation (T_C=25°C)	4	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = 0.1mA, I_C = 0	6			V
I_{CER}	Collector Cut-off Current	V_{CE} = 250V, R_{BE} = 100KΩ			100	μA
h_{FE1}	DC Current Gain	V_{CE} = 20V, I_C = 40mA	40			
h_{FE2}		V_{CE} = 50V, I_C = 5mA	30			
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 50mA, I_B = 5mA			1.2	V
V_{BE}(on)	Base-Emitter On Voltage	V_{CE} = -20V, I_C = 40mA			1.2	V
f_T	Current Gain Bandwidth Product	V_{CE} = 10V, I_C = 10mA		100		MHz
C_{ob}	Output Capacitance	V_{CB} = 50V, f = 1MHz		3	4.5	pF

Typical Characteristics

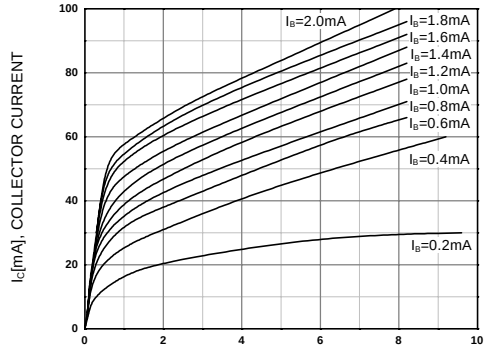


Figure 1. Static Characteristic

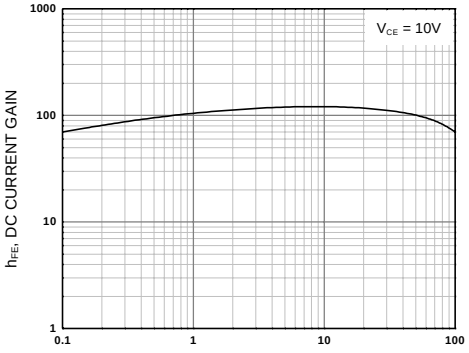


Figure 2. DC current Gain

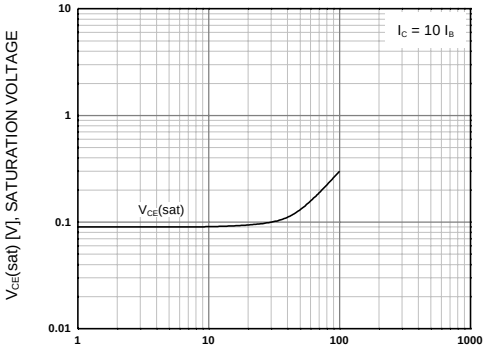


Figure 3. Collector-Emitter Saturation Voltage

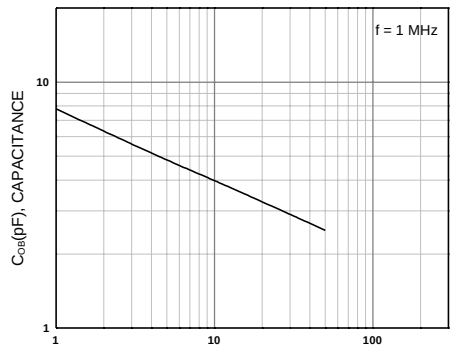


Figure 4. Collector Output Capacitance

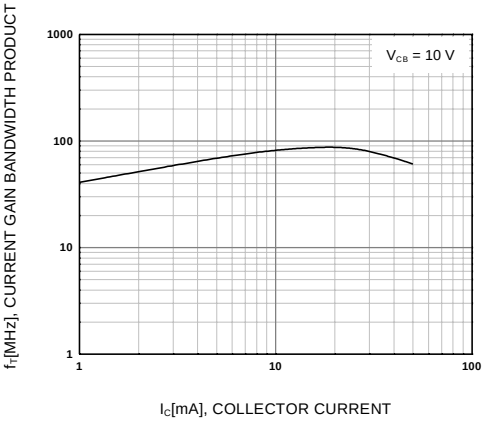


Figure 5. Current Gain Bandwidth Product

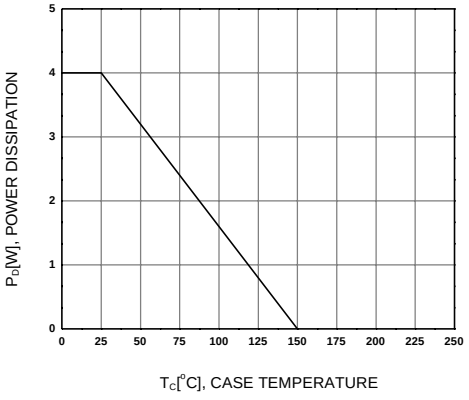


Figure 6. Power Derating

Package Demensions

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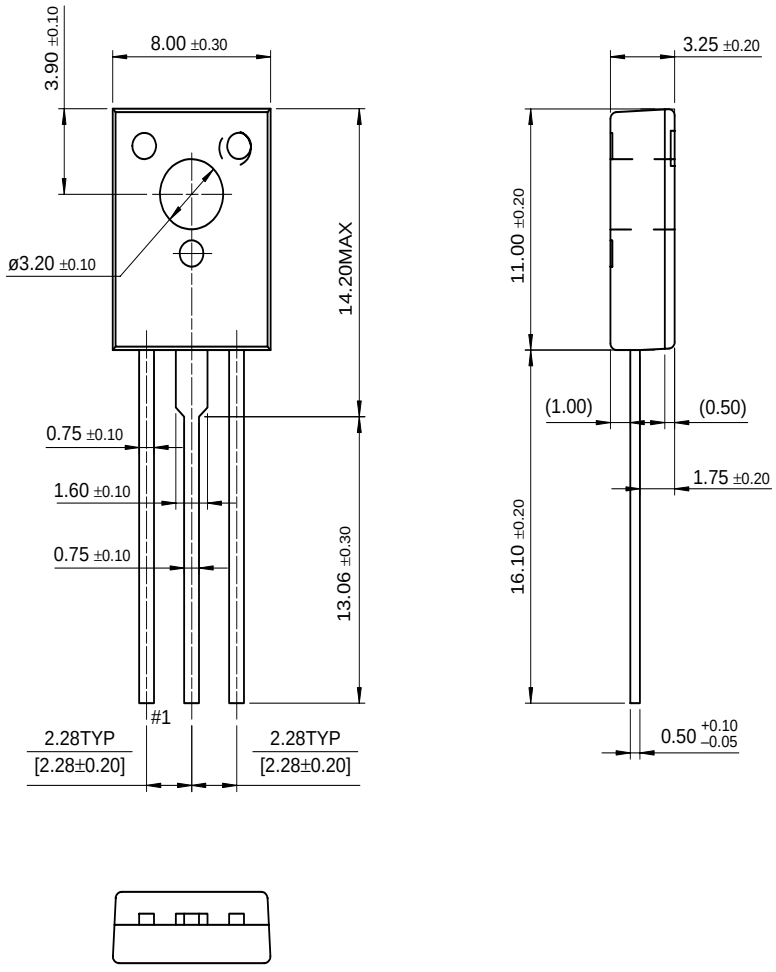

Dimensions in Millimeters

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POP™
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QS™
Quiet Series™
SuperSOT™-3
SuperSOT™-6
SuperSOT™-8
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