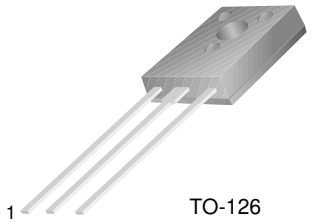
FAIRCHILD
SEMICONDUCTOR TM

KSC2688

Color TV Chroma Output & Video Output



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	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	200	mA
P_C	Collector Dissipation (T_a=25°C)	1.25	W
P_C	Collector Dissipation (T_C=25°C)	10	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_{CBO}	Collector-Base Breakdown Voltage	I_C =0.1mA, I_E = 0	300			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = 5mA, I_B = 0, R_{BE} = ∞	300			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = 0.1mA, I_C = 0	5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 200V, I_E = 0			100	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4V, I_C = 0			100	μA
h_{FE}	* DC Current Gain	V_{CE} = 10V, I_C = 10mA	40		250	
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = 50mA, I_B = 5mA			1.5	V
f_T	Current Gain Bandwidth Product	V_{CE} = 30V, I_E = -10mA	50	80		MHz
C_{re}	Feed Back Capacitance	V_{CB} = 30V, I_E = 0 f = 1MHz			3	pF

* Pulse Test: PW≤350μs, Duty Cycle≤2%

h_{FE} Classificntion

Classification	R	O	Y	G
h_{FE}	40 ~ 80	60 ~ 120	100 ~ 200	160 ~ 250

Typical Characteristics

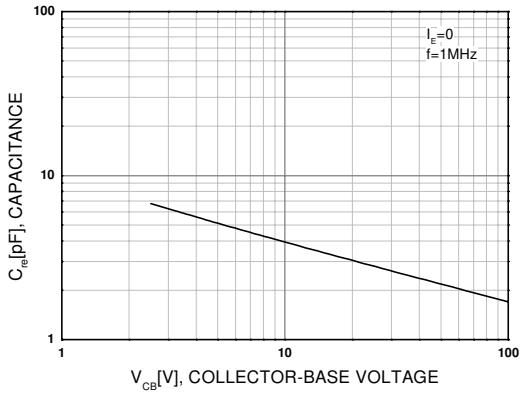


Figure 1. Feedback Capacitance

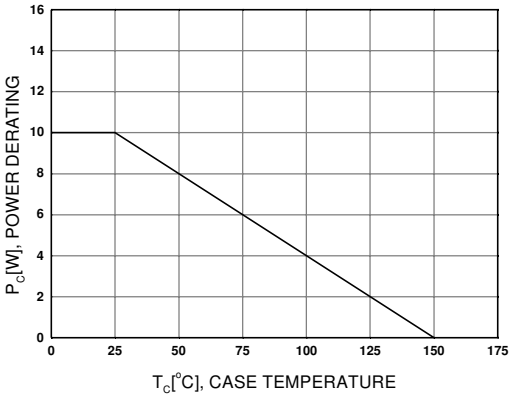


Figure 2. Power Derating

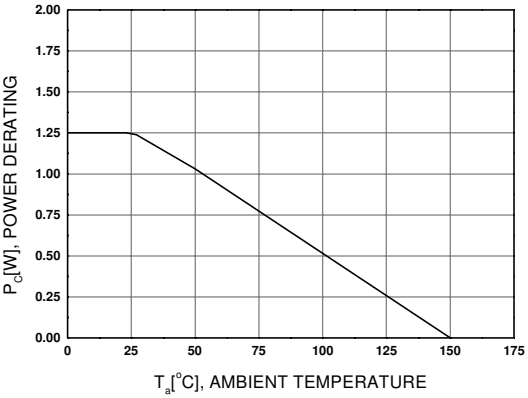


Figure 3. Power Derating

Package Demensions

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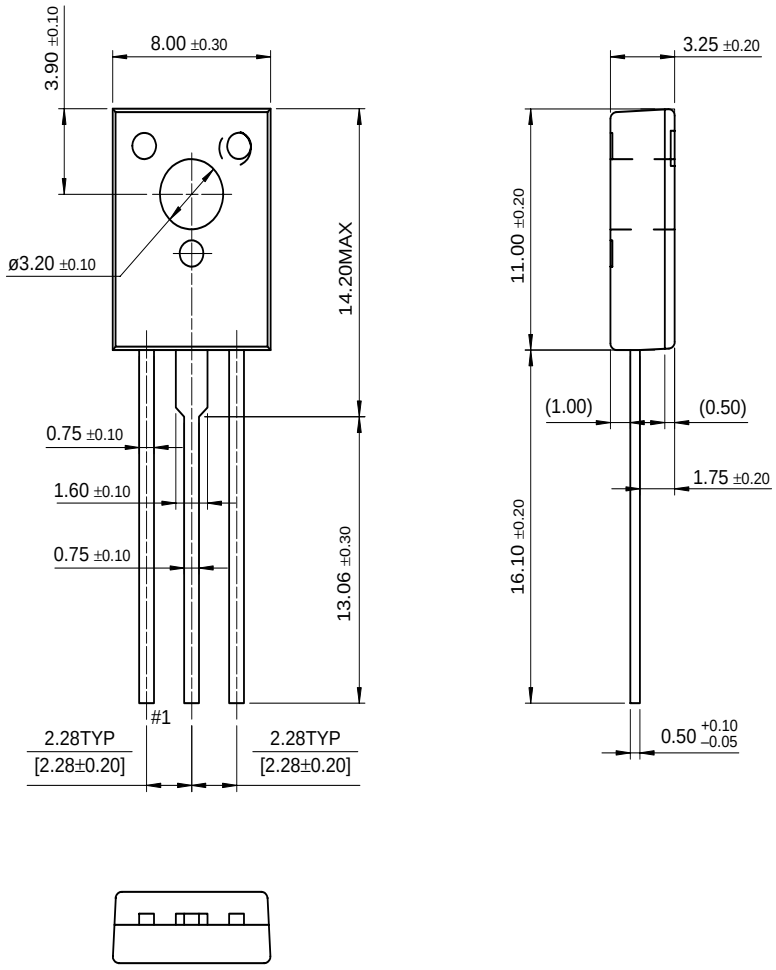

Dimensions in Millimeters

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Datasheet Identification	Product Status	Definition
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

KSC2688
NPN Epitaxial Silicon Transistor

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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
KSC2688YSTSSTU	Full Production	$0.164	TO-126	3	RAIL
KSC2688YSTU	Full Production	$0.164	TO-126	3	RAIL
KSC2688OSTU	Full Production	$0.164	TO-126	3	RAIL
KSC2688YS	Full Production	$0.164	TO-126	3	BULK
KSC2688OS	Full Production	$0.164	TO-126	3	BULK

* 1,000 piece Budgetary Pricing

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