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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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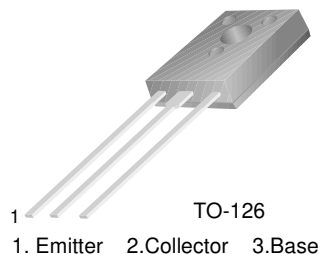
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# KSC2688

KSC2688

**Color TV Chroma Output & Video Output**



## NPN Epitaxial Silicon Transistor

**Absolute Maximum Ratings**  $T_C=25^\circ\text{C}$  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 ( $T_a=25^\circ\text{C}$ )	1.25	W
$P_C$	Collector Dissipation ( $T_C=25^\circ\text{C}$ )	10	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

**Electrical Characteristics**  $T_C=25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = 0.1\text{mA}, I_E = 0$	300			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 5\text{mA}, I_B = 0, R_{BE} = \infty$	300			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = 0.1\text{mA}, I_C = 0$	5			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = 200\text{V}, I_E = 0$			100	$\mu\text{A}$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = 4\text{V}, I_C = 0$			100	$\mu\text{A}$
$h_{FE}$	* DC Current Gain	$V_{CE} = 10\text{V}, I_C = 10\text{mA}$	40		250	
$V_{CE(sat)}$	* Collector-Emitter Saturation Voltage	$I_C = 50\text{mA}, I_B = 5\text{mA}$			1.5	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = 30\text{V}, I_E = -10\text{mA}$	50	80		MHz
$C_{re}$	Feed Back Capacitance	$V_{CB} = 30\text{V}, I_E = 0$ $f = 1\text{MHz}$			3	pF

\* Pulse Test:  $PW \leq 350\mu\text{s}$ , Duty Cycle  $\leq 2\%$

## $h_{FE}$ Classification

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

# Typical Characteristics

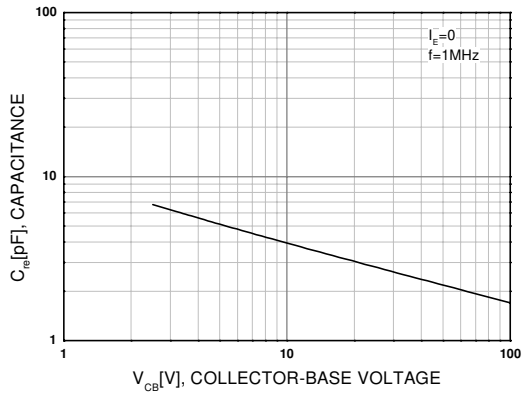


Figure 1. Feedback Capacitance

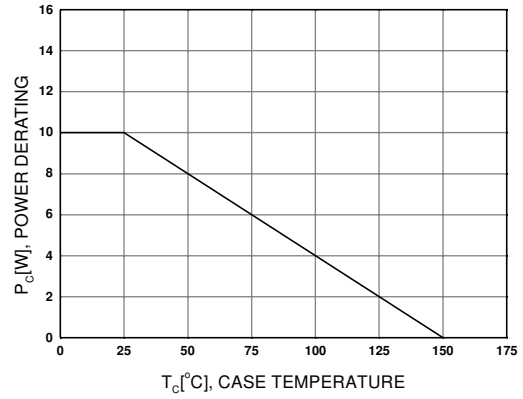


Figure 2. Power Derating

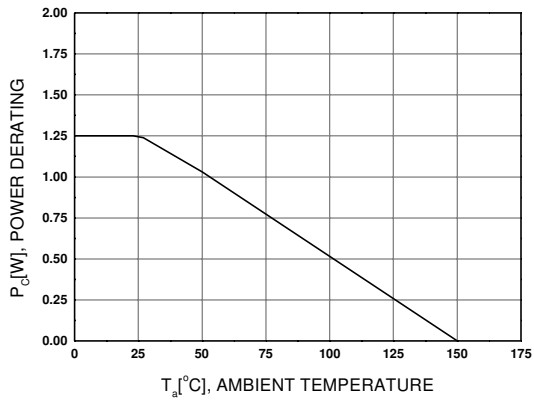
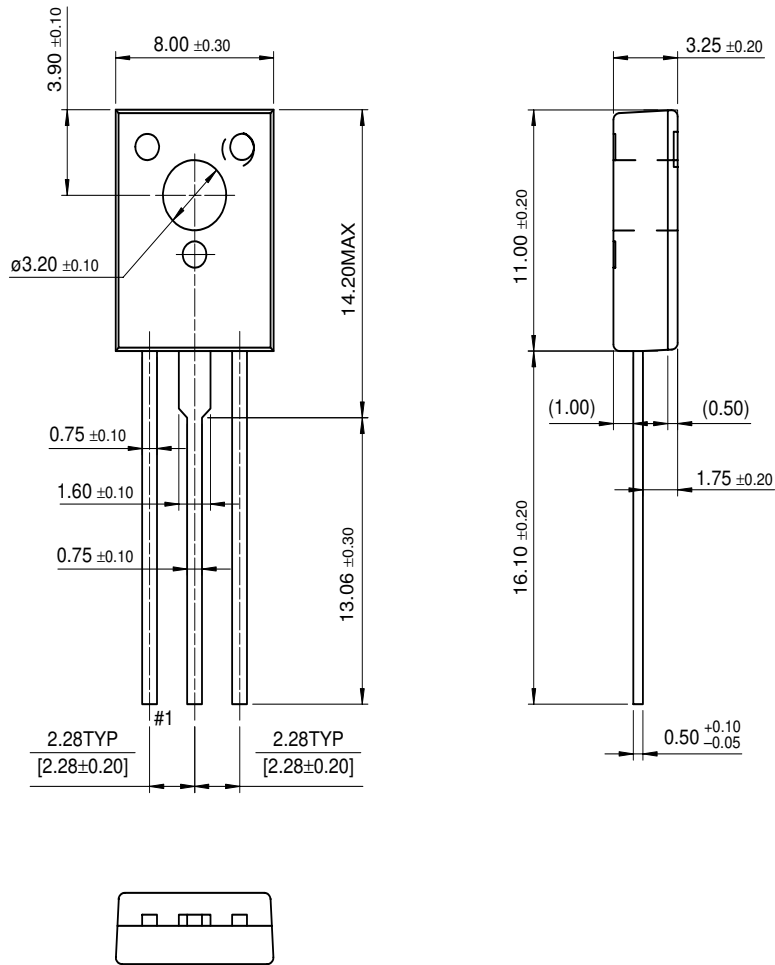


Figure 3. Power Derating

# Package Dimensions

KSC2688

## TO-126



Dimensions in Millimeters

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