

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

2SC1569

DESCRIPTION

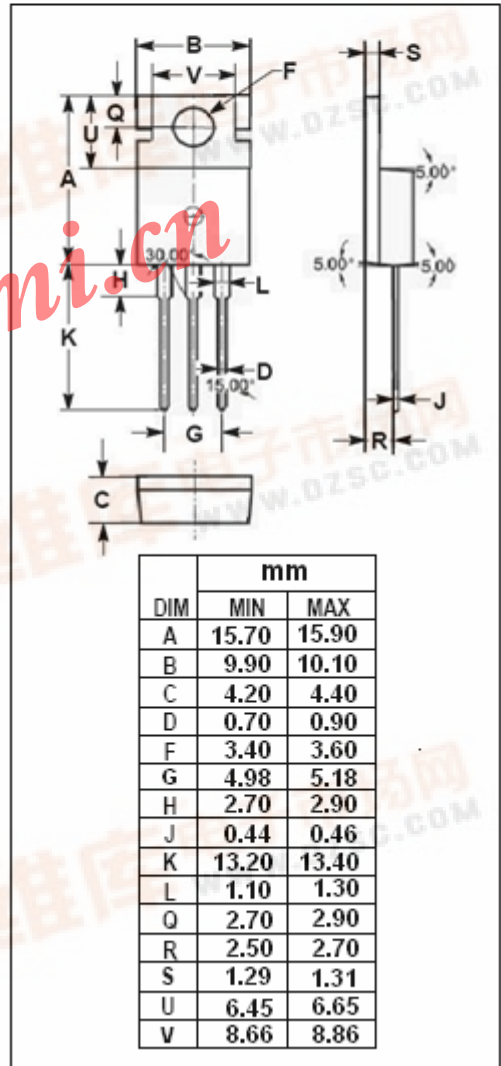
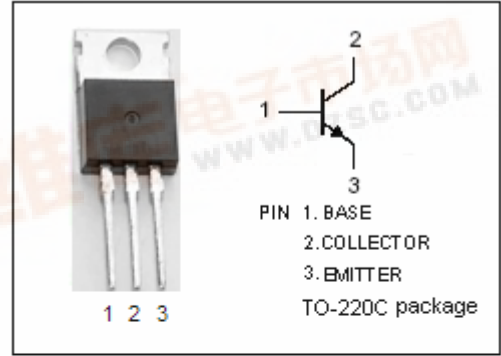
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 300V(\text{Min})$
- DC Current Gain-  
:  $h_{FE} = 40-170 @ I_C = 50mA, V_{CE} = 10V$
- High Current-Gain Bandwidth Product

APPLICATIONS

- Designed for color TV chroma output applications.

ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	150	mA
$I_E$	Emitter Current-Continuous	-150	mA
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	W
	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	12.5	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



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## ELECTRICAL CHARACTERISTICS

 $T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=5\text{mA}; I_B=0$	300			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=100\text{mA}; I_B=20\text{mA}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=100\text{mA}; I_B=20\text{mA}$			1.2	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=100\text{V}; I_E=0$			1.0	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			1.0	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=50\text{mA}; V_{CE}=10\text{V}$	40		170	
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=50\text{V}; f_{test}=1\text{MHz}$		5		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C=30\text{mA}; V_{CE}=10\text{V}$	40			MHz