

# isc Silicon NPN Power Transistor

## 2SC1755

### DESCRIPTION

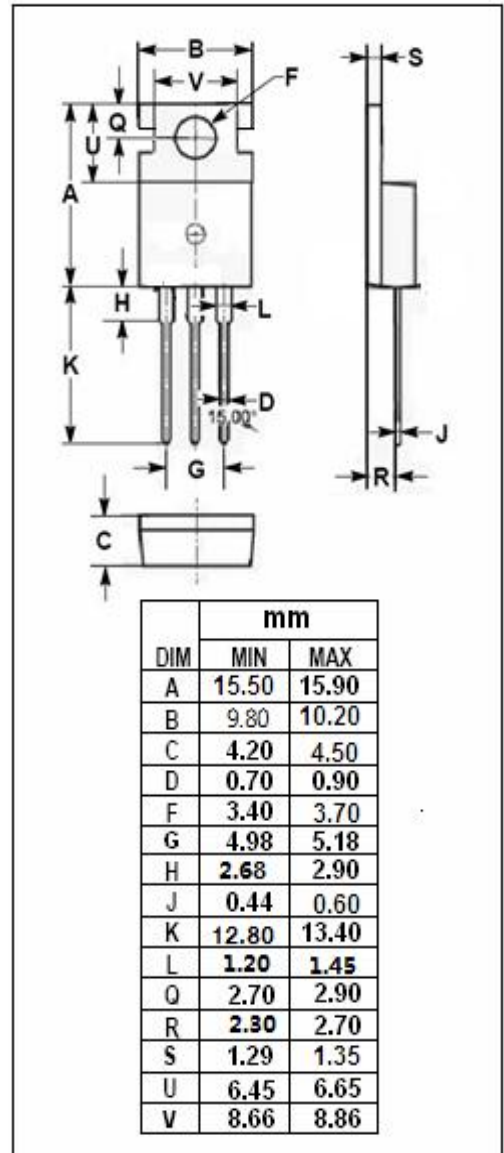
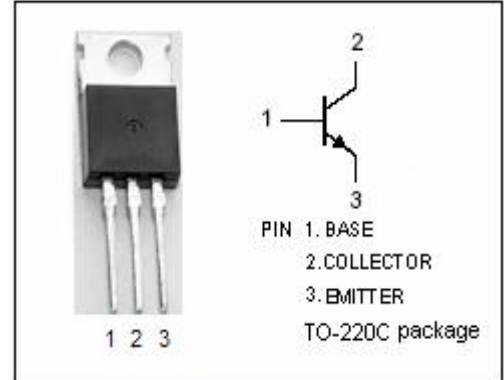
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 300V(\text{Min})$
- DC Current Gain-  
:  $h_{FE} = 40-200 @ I_C = 10mA, V_{CE} = 10V$
- High Current-Gain Bandwidth Product
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Designed for color TV chroma, video , audio 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	7	V
$I_C$	Collector Current-Continuous	200	mA
$I_{CM}$	Collector Current-Peak	700	mA
$P_C$	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.2	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	15	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-40~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SC1755****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=50\text{mA}; I_B=5\text{mA}$			2.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=200\text{V}; I_E=0$			0.1	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			0.1	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=10\text{mA}; V_{CE}=10\text{V}$	40		200	
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=50\text{V}; f_{test}=1\text{MHz}$			5.3	pF
$f_T$	Current-Gain—Bandwidth Product	$I_C=10\text{mA}; V_{CE}=30\text{V}$	50			MHz

**◆  $h_{FE}$  Classifications**

C	D	E
40-80	60-120	100-200

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