

**DESCRIPTION**

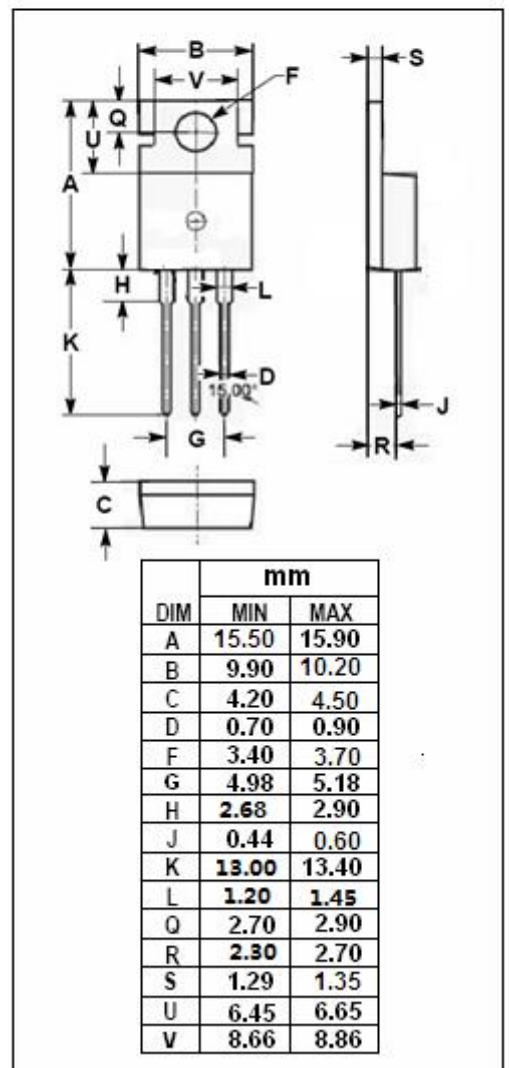
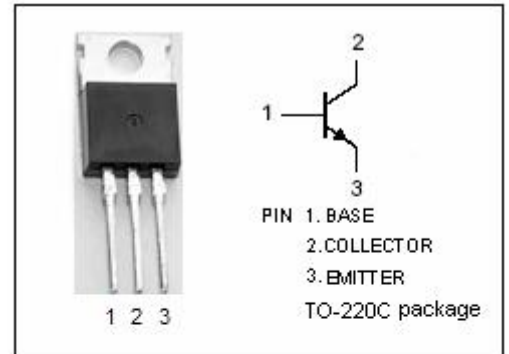
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 80V(\text{Min})$
- High Power Dissipation
- Complement to Type 2SB690

**APPLICATIONS**

- Designed for low frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	100	V
$V_{CEO}$	Collector-Emitter Voltage	80	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	4	A
$I_{CM}$	Collector Current-Peak	8	A
$P_C$	Total Power Dissipation @ $T_C=25^\circ\text{C}$	40	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-45~150	$^\circ\text{C}$



**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	$I_C= 10\text{mA}; R_{BE}= \infty$	80			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 10 \mu\text{A}; I_C= 0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 2\text{A}; I_B= 0.2\text{A}$			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C= 1\text{A}; V_{CE}= 5\text{V}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 80\text{V}; I_E= 0$			0.1	mA
$h_{FE-1}$	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 5\text{V}$	60		200	
$h_{FE-2}$	DC Current Gain	$I_C= 0.1\text{A}; V_{CE}= 5\text{V}$	35			
$C_{OB}$	Collector Output Capacitance	$I_E= 0; V_{CB}= 20\text{V}; f= 1\text{MHz}$		40		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C= 0.5\text{A}; V_{CE}= 5\text{V}$		10		MHz

◆  **$h_{FE-1}$  Classifications**

B	C
60-120	100-200