

isc Silicon PNP Power Transistor

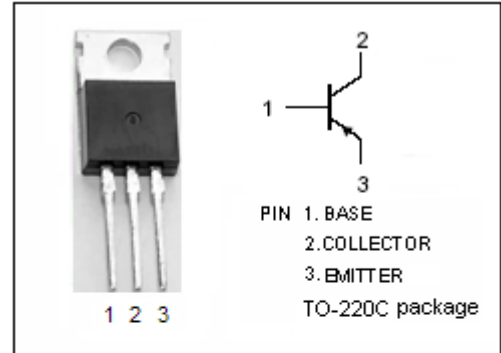
2SB689

DESCRIPTION

- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -100V(\text{Min})$
- High Power Dissipation
- Wide Area of Safe Operation

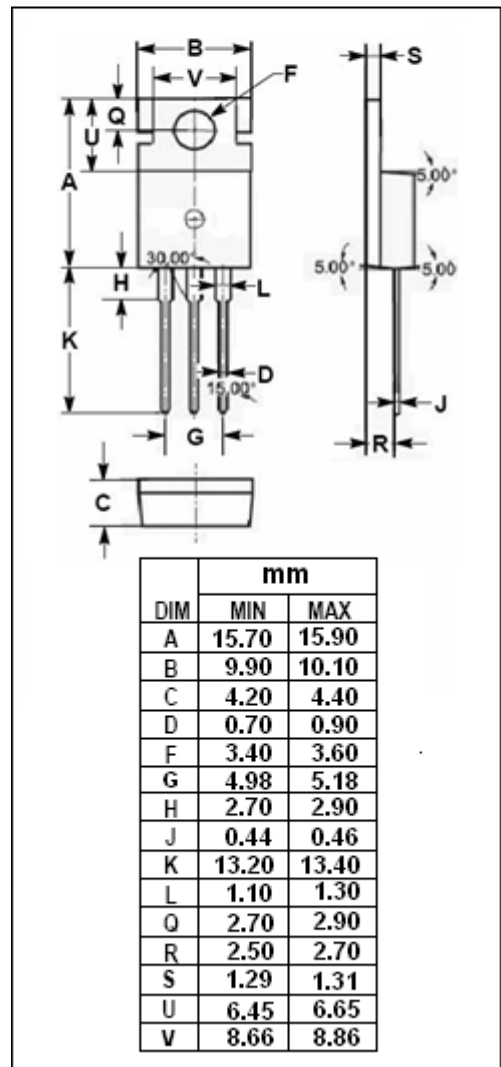
APPLICATIONS

- Designed for low frequency power amplifier and TV vertical deflection output 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	-100	V
$V_{EBO}$	Emitter-Base Voltage	-4	V
$I_C$	Collector Current-Continuous	-4	A
$I_{CM}$	Collector Current-Peak	-5	A
$P_C$	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.8	W
	Total Power Dissipation @ $T_C=25^\circ\text{C}$	40	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-45~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****2SB689****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	$I_C = -10\text{mA}; R_{BE} = \infty$	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}; I_C = 0$	-4			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -0.1\text{A}$			-1.0	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -80\text{V}; R_{BE} = \infty$			-100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -3.5\text{V}; I_C = 0$			-50	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -4\text{V}$	50		250	
$h_{FE-2}$	DC Current Gain	$I_C = -50\text{mA}; V_{CE} = -4\text{V}$	25		350	