

**DESCRIPTION**

- High Power Gain-  
:  $G_{pe} \geq 12\text{dB}$ ,  $f = 27\text{MHz}$ ,  $P_O = 16\text{W}$
- High Reliability

**APPLICATIONS**

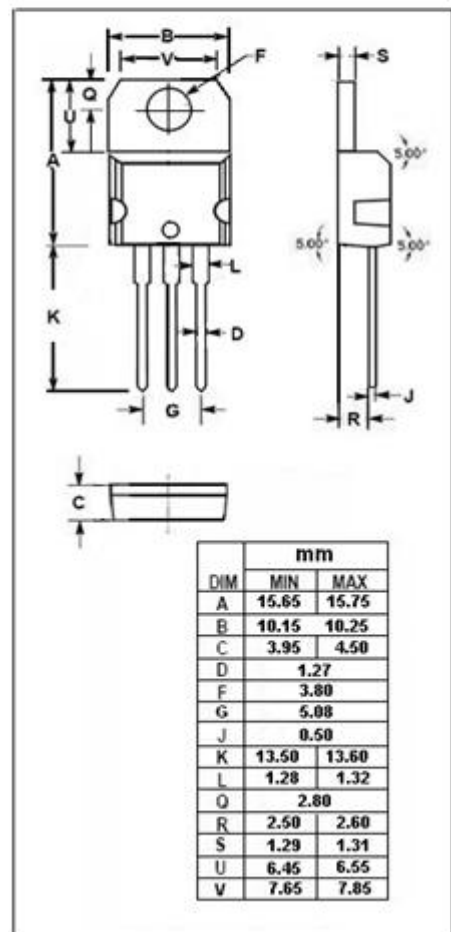
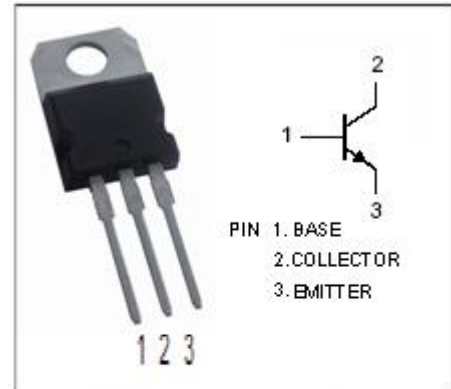
- Designed for 10~14 watts output power class AB amplifiers applications in HF band.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage $R_{BE} = \infty$	25	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	6	A
$P_C$	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	20	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.7	
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	73.5	$^\circ\text{C/W}$
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	6.25	$^\circ\text{C/W}$



**ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 1\text{mA}, I_E= 0$	60			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C= 10\text{mA}; R_{BE}= \infty$	25			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 5\text{mA}, I_C= 0$	5			V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 30\text{V}; I_E= 0$			0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 4\text{V}; I_C= 0$			0.1	mA
$h_{FE}$	DC Current Gain	$I_C= 10\text{mA}; V_{CE}= 12\text{V}$	10		180	
$P_O$	Output Power	$V_{CC}= 12\text{V}; P_{in}= 1\text{W}; f= 27\text{MHz}$	16	18		W
$\eta_C$	Collector Efficiency		60	70		%

◆  **$h_{FE}$  Classifications**

X	A	B	C	D
10-25	20-45	35-70	55-110	90-180