

**Silicon PNP Power Transistor**

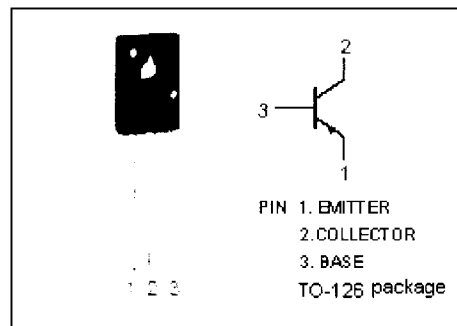
**2SA738**

**DESCRIPTION**

- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -25V$  (Min)
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC1368

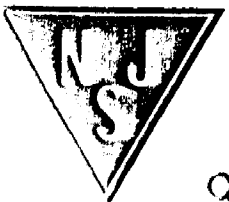
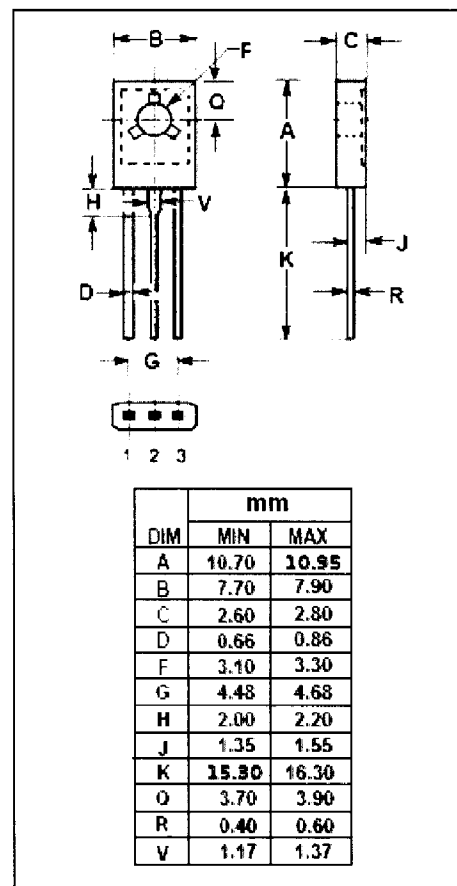
**APPLICATIONS**

- Designed for use as driver stages in high-fidelity amplifiers and TV circuits.



**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-25	V
$V_{CEO}$	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-2.5	A
$I_{CM}$	Collector Current-Peak	-3.0	A
$P_C$	Total Power Dissipation @ $T_C=25^\circ C$	8	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature Range	-55~150	°C



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# 2SA738

## 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	$I_C = -10\text{mA}; I_B = 0$	-25			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-0.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -500\text{mA}; V_{CE} = -2\text{V}$			-1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -25\text{V}; I_E = 0$			-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	$I_C = -500\text{mA}; V_{CE} = -2\text{V}$	60		320	
$f_T$	Current-Gain—Bandwidth Product	$I_C = -50\text{mA}; V_{CE} = -5\text{V}$		160		MHz