

*New Jersey Semi-Conductor Products, Inc.*

20 STERN AVE.  
 SPRINGFIELD, NEW JERSEY 07081  
 U.S.A.

TELEPHONE: (973) 376-2922  
 (212) 227-6005  
 FAX: (973) 376-8960

**Silicon NPN Power Transistor**

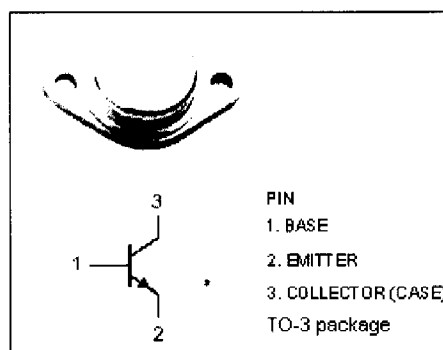
**2SC937**

**DESCRIPTION**

- High Breakdown Voltage-  
 :  $V_{CBO} = 1200V(\text{Min})$
- High Reliability

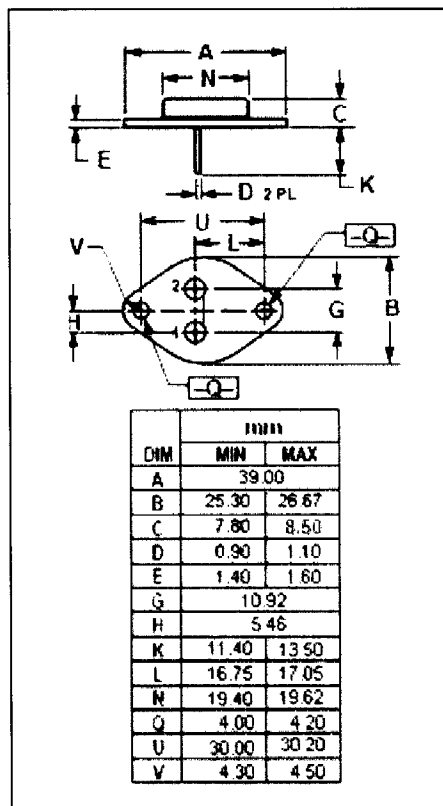
**APPLICATIONS**

- Designed for TV horizontal deflection output applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1200	V
$V_{CEO}$	Collector-Emitter Voltage	500	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current- Continuous	2.5	A
$I_{CP}$	Collector Current-Pulse	6	A
$P_C$	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	22	W
$T_J$	Junction Temperature	125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-45~125	$^\circ\text{C}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

**Quality Semi-Conductors**

**Silicon NPN Power Transistor****2SC937****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	$I_C=10\text{mA}; R_{BE}=\infty$	500			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.8\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.8\text{A}$			1.8	V
$I_{CBX}$	Collector Cutoff Current	$V_{CB}=1200\text{V}; V_{EB}=1.5\text{V}$			1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			0.2	mA
$t_f$	Fall Time	$I_C=2.5\text{A}, I_{B1}=0.8\text{A}, I_{B2}=-1.1\text{A}; L_B=10\mu\text{H}$			1.2	$\mu\text{s}$