

isc Silicon NPN Power Transistor

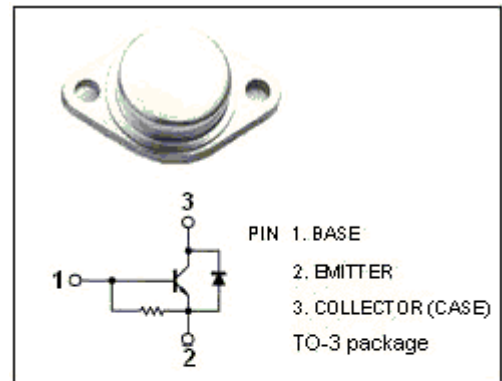
2SD993

DESCRIPTION

- High Breakdown Voltage-  
:  $V_{CBO} = 1500V$  (Min)
- Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = 10V$ (Max.)@  $I_C = 2.5A$
- Built-in Damper Diode

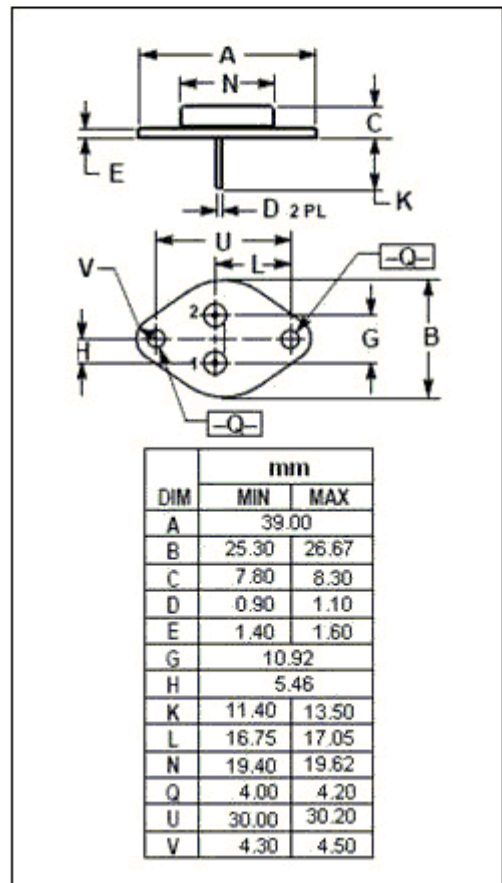
APPLICATIONS

- Designed for horizontal deflection output applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1500	V
$V_{CEO}$	Collector-Emitter Voltage	600	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current- Continuous	3	A
$I_{CP}$	Collector Current- Peak	6	A
$P_C$	Collector Power Dissipation @ $T_C = 25^{\circ}C$	50	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-40~150	$^{\circ}C$



**isc Silicon NPN Power Transistor****2SD993****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}; I_B=0; L=35\text{mH}$	600			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=200\text{mA}; I_C=0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.6\text{A}$			10	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.6\text{A}$			1.3	V
$I_{CES}$	Collector Cutoff Current	$V_{CB}=1500\text{V}; V_{EB}=0$			1.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$	44		133	mA
$h_{FE}$	DC Current Gain	$I_C=2\text{A}; V_{CE}=5\text{V}$	3		15	