

**isc Silicon NPN Power Transistor**

**2SD725**

**DESCRIPTION**

- With TO-3 Package
- Low collector saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

**APPLICATIONS**

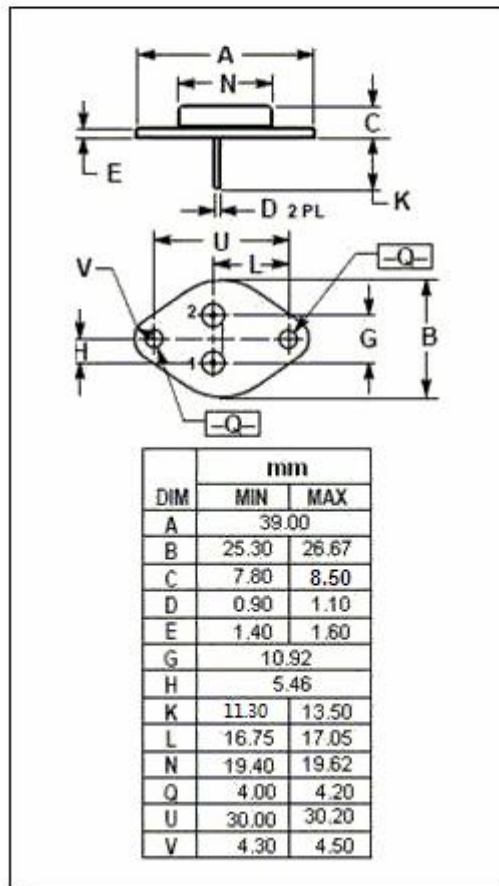
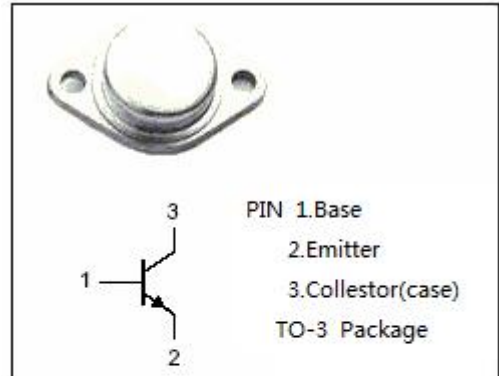
- Designed for color TV horizontal deflection driver

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CB0</sub>	Collector-Base Voltage	1500	V
V <sub>CEO</sub>	Collector-Emitter Voltage	600	V
V <sub>EBO</sub>	Emitter-Base Voltage	7	V
I <sub>C</sub>	Collector Current-Continuous	6	A
P <sub>C</sub>	Collector Power Dissipation @ T <sub>C</sub> =25°C	50	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65-150	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	3.5	°C/W



**isc Silicon NPN Power Transistor****2SD725****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5A; I_B= 0.8A$		5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5A; I_B= 0.8A$		1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=1500V; I_B= 0$		1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 10V; I_C=0$		10	uA
$h_{FE-1}$	DC Current Gain	$I_C= 1A; V_{CE}= 5V$	8	36	
$h_{FE-2}$	DC Current Gain	$I_C= 5A; V_{CE}= 5V$	5		
$t_f$	Fall Time	$I_C= 5.0A; I_B= 0.8A$		2.0	$\mu s$

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