

**isc Silicon NPN Power Transistor**

**2SC3675**

**DESCRIPTION**

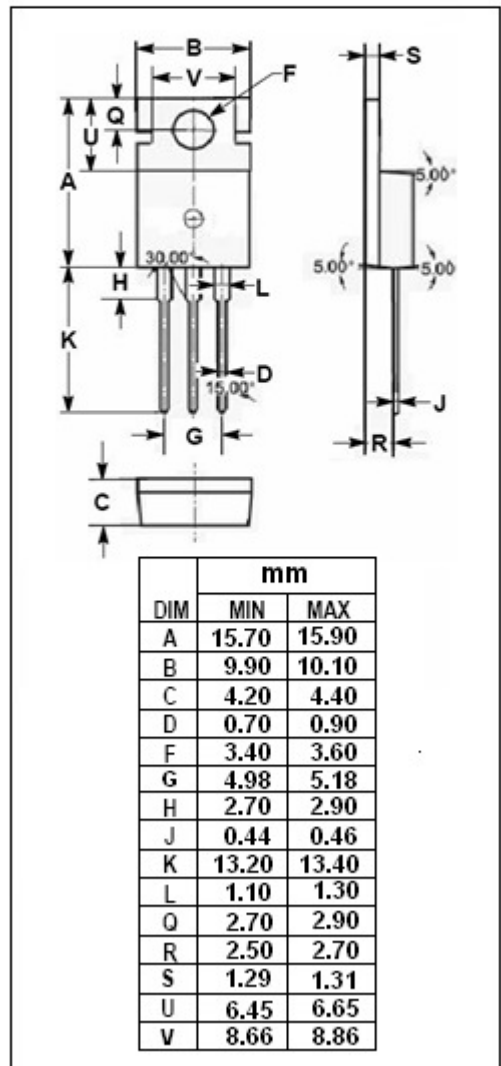
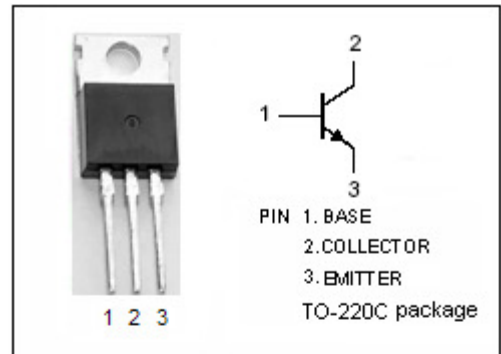
·High breakdown voltage

**APPLICATIONS**

- High voltage amplifiers
- High-voltage switching applications
- Dynamic focus applications
- High reliability

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

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	1350	V
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current-Continuous	3	A
P <sub>T</sub>	Total Power Dissipation @ T <sub>C</sub> =25°C	10	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



**isc Silicon NPN Power Transistor****2SC3675****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Emitter Sustaining Voltage	$I_C=1\text{mA}; I_B=0$	1350			V
$V_{(BR)CEO}$	Collector-Emitter Sustaining Voltage	$I_C=1\text{mA}; R_{BE}=\infty$	800			V
$V_{(BR)EBO}$	Collector-Emitter Sustaining Voltage	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=20\text{mA}; I_B=4\text{mA}$			5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=20\text{mA}; I_B=4\text{mA}$			2	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=800\text{V}; I_E=0$			10	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$			10	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=10\text{mA}; V_{CE}=5\text{V}$	20			
$C_{ob}$	Output Capacitance	$V_{CB}=100\text{V}; f=1\text{MHz}$		2.8		PF
$f_T$	Current-Gain—Bandwidth Product	$I_C=10\text{mA}; V_{CE}=10\text{V}$		6		MHz