

**isc Silicon NPN Power Transistor**
**2SC1986**
**DESCRIPTION**

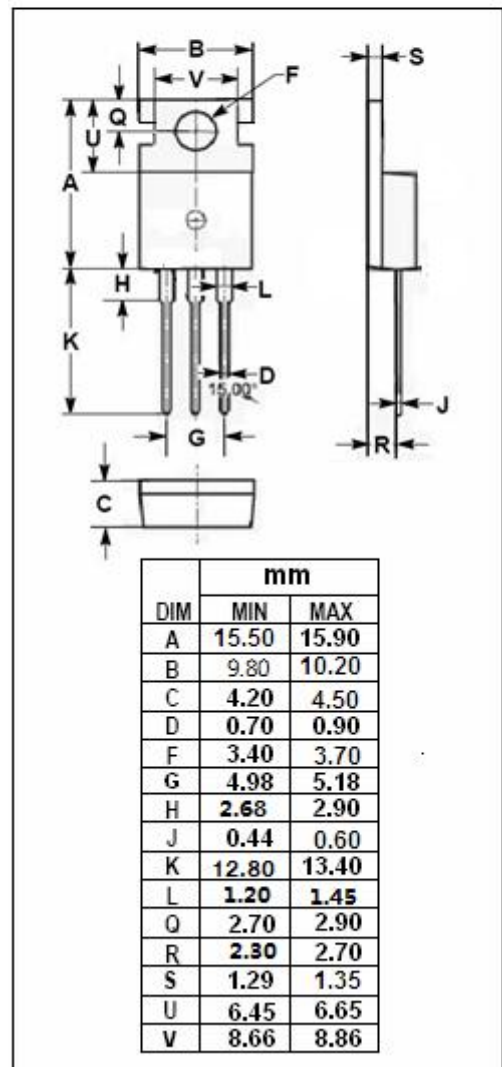
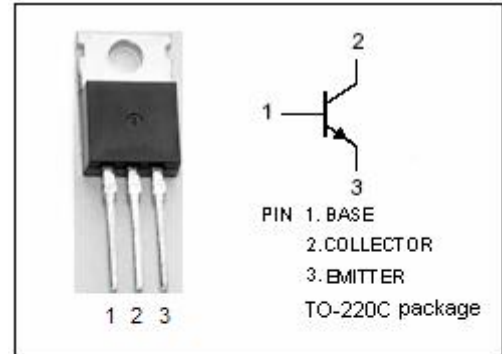
- Silicon NPN tripe diffused mesa
- Collector-Emitter Breakdown Voltage-  
: $V_{(BR)CEO} = 80(V)(Min.)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- General and industrial purpose

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	100	V
$V_{CEO}$	Collector-Emitter Voltage	80	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_c$	Collector Current-Continuous	6	A
$P_C$	Total Power Dissipation @ $T_C=25^{\circ}C$	40	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



**isc Silicon NPN Power Transistor****2SC1986****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	$I_C=25\text{mA}; I_B=0$	80			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3\text{A}; I_B=300\text{mA}$			1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=100\text{V}; I_E=0$			1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			1	mA
$h_{FE}$	DC Current Gain	$I_C=1\text{A}; V_{CE}=4\text{V}$	40			
$f_T$	Current-Gain—Bandwidth Product	$I_E=500\text{mA}; V_{CE}=12\text{V}$		10		MHz

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