

# **isc Silicon NPN Power Transistor**

# **KTC2800**

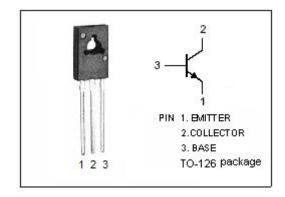
### **DESCRIPTION**

- · High Collector-Emitter Breakdown Voltage V<sub>CEO</sub>= 160V(Min)
- Complement to Type KTA1700
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **APPLICATIONS**

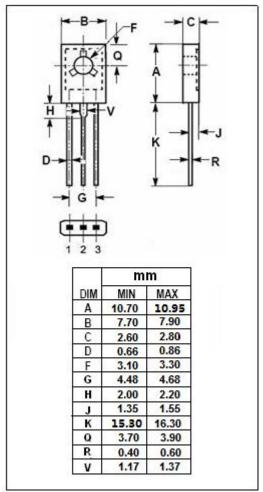
Designed for high voltage applications





## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>СВО</sub>	Collector-Base Voltage 160		V	
V <sub>CEO</sub>	Collector-Emitter Voltage	160	V	
V <sub>EBO</sub>	Emitter-Base Voltage	5.0	V	
lc	Collector Current 1.5		Α	
I <sub>B</sub>	Base Current 1.0		Α	
P <sub>C</sub>	Collector Power Dissipation @T <sub>a</sub> =25°C	1.5	W	
	Collector Power Dissipation @Tc=25°C	10		
TJ	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature -55~150		$^{\circ}$ C	





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#### **ELECTRICAL CHARACTERISTICS**

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> = 0	160			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 500mA; I <sub>B</sub> = 50mA			1.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 500mA; V <sub>CE</sub> = 5V			1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 160V ; I <sub>E</sub> = 0			1.0	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> =0			1.0	μА
h <sub>FE</sub>	DC Current Gain	Ic= 100mA ; VcE= 5V	70		240	
Сов	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 10V;f= 1.0MHz		25		pF
fτ	Current-Gain—Bandwidth Product	I <sub>C</sub> = 100m A ; V <sub>CE</sub> = 10V		100		MHz

### ♦ h<sub>FE</sub> Classifications

0	Y		
70-140	120-240		

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