

**isc Silicon NPN Power Transistor**
**KTC2020D**
**DESCRIPTION**

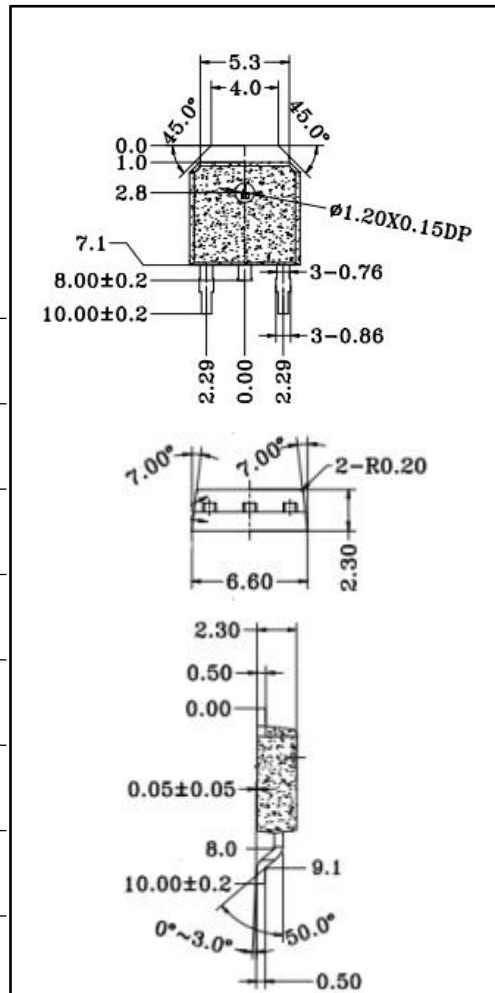
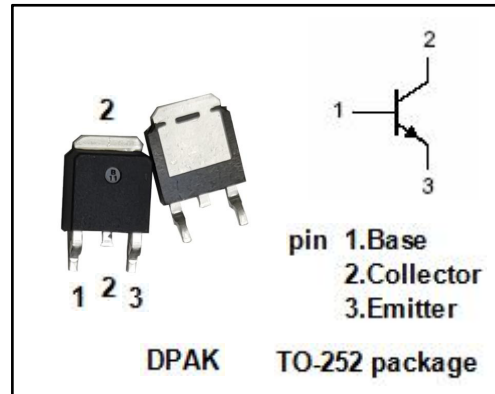
- High Breakdown Voltage-  
:  $V_{(BR)CBO} = 60V(\text{Min})$
- High Switching Speed
- High Reliability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Ultrahigh-definition CRT display horizontal deflection output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	7.0	V
$I_C$	Collector Current-Continuous	3.0	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	20	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



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## ELECTRICAL CHARACTERISTICS

T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 50mA; I <sub>B</sub> = 0	60		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2.0A; I <sub>B</sub> = 0.2A		1.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 0.5A ; V <sub>CE</sub> = 5V		1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 60V ; I <sub>E</sub> = 0		100	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7.0V; I <sub>C</sub> = 0		100	μ A
h <sub>FE</sub>	DC current gain	I <sub>C</sub> = 0.5A ; V <sub>CE</sub> = 5V	100	300	

◆ h<sub>FE</sub> Classifications

Y	GR
100-200	150-300

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