

isc Silicon NPN Power Transistor

ISC163A

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 700V$ (Min)
- High Power Dissipation-
: $P_D = 125W @ T_C = 25^{\circ}C$

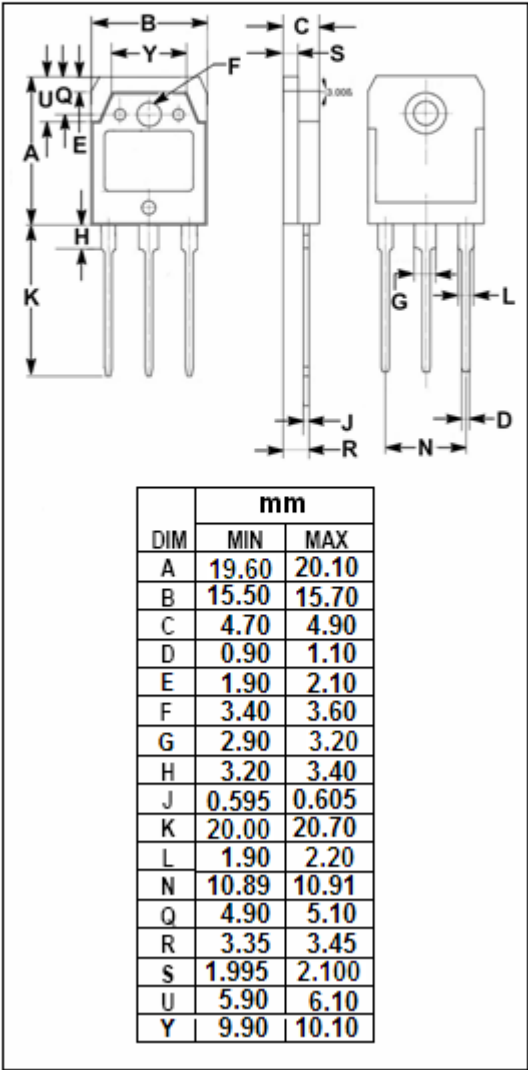
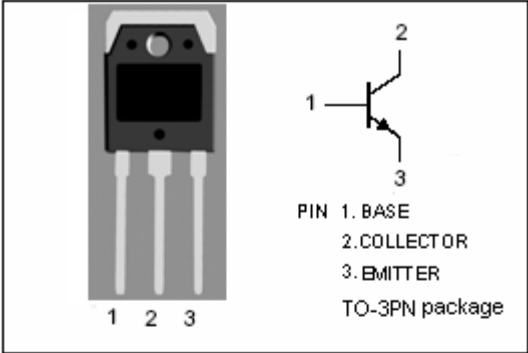
APPLICATIONS

- Designed for use in large screen color deflection circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector- Emitter Voltage($V_{BE} = 0$)	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current- Continuous	5	A
I_{CM}	Collector Current-Peak	7.5	A
I_B	Base Current- Continuous	4	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	125	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}C$

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.6	$^{\circ}C/W$



isc Silicon NPN Power Transistor**ISC163A****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	700			V
V _{EBO}	Emitter-Base Voltage	I _E = 10mA ; I _C = 0	5			V
V _{CE(sat)} ★	Collector-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2.0A			5.0	V
V _{BE(sat)} ★	Base-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2.0A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V ; V _{BE} = 0			1.0	mA
h _{FE} ★	DC Current Gain	I _C = 4.5A ; V _{CE} = 5V	2.25			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		125		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V; f _{test} = 1.0MHz		4		MHz

★:Pulsed: Pulse duration = 300 us, duty cycle ≤2 %