

isc Silicon NPN Power Transistor

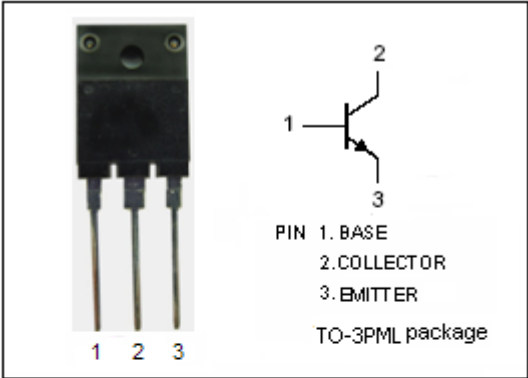
2SD2581

DESCRIPTION

- High Breakdown Voltage-
: V_{CBO} = 1500V (Min)
- High Switching Speed
- High Reliability

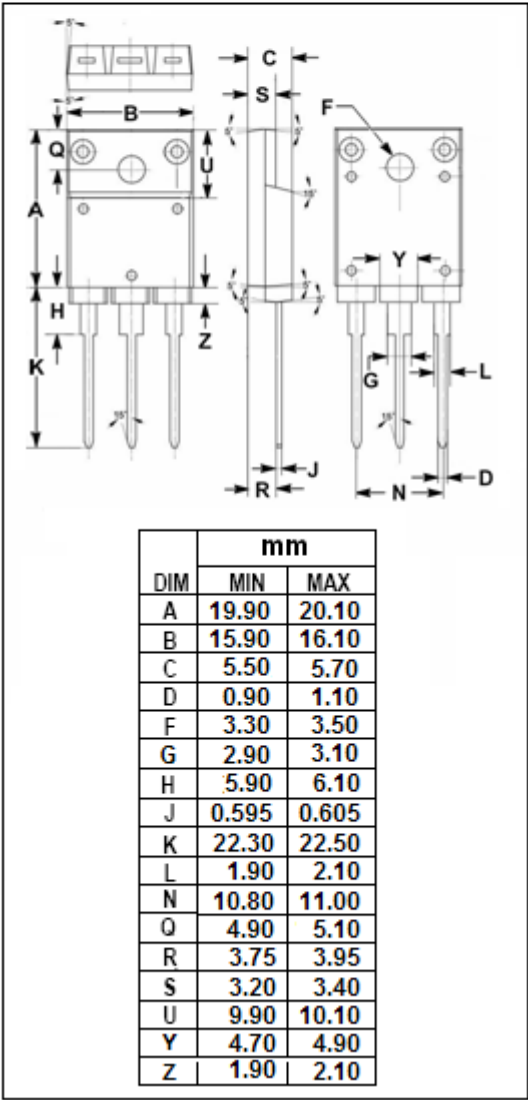
APPLICATIONS

- Color TV horizontal deflection output applications



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	10	A
I_{CP}	Collector Current-Pulse	30	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$	3.0	W
	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	70	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

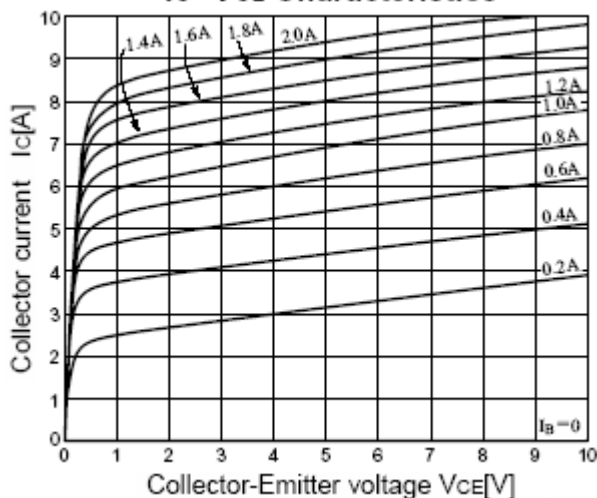
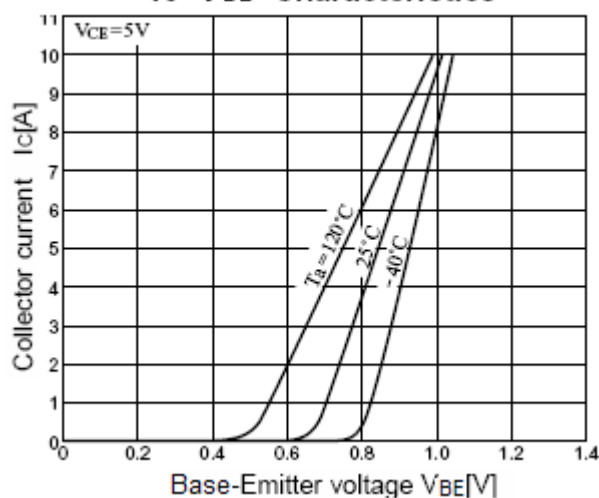
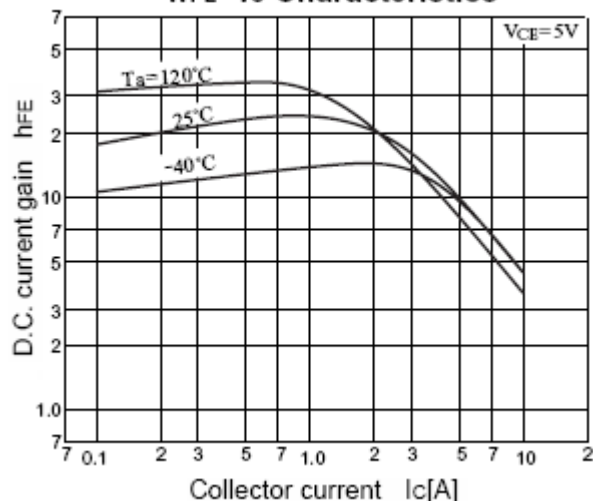
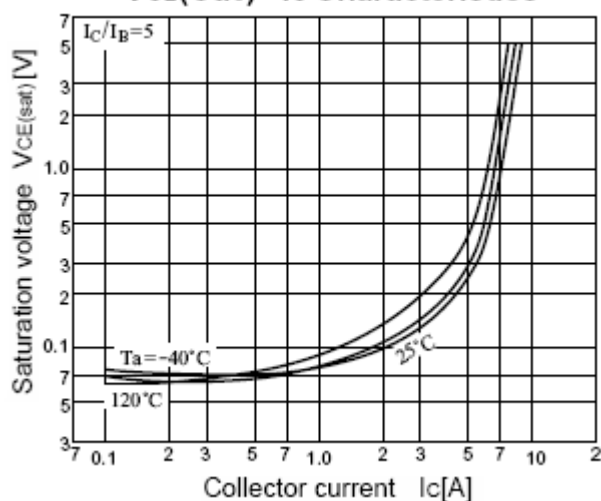
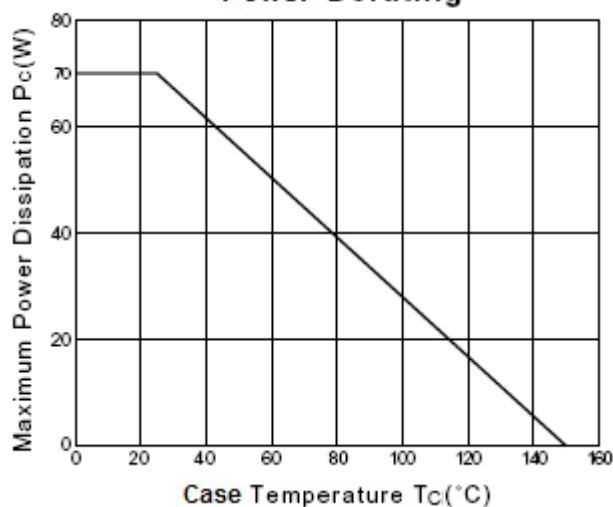


isc Silicon NPN Power Transistor**2SD2581****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 100mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 1.6A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 8A; I _B = 1.6A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 800V ; I _E = 0			10	μ A
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V ; R _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V ; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	20		35	
h _{FE-2}	DC Current Gain	I _C = 8A ; V _{CE} = 5V	5		8	
t _f	Fall Time	I _C = 6A , I _{B1} = 1.2A ; I _{B2} = -2.4A P _W =20 μ s ; Duty Cycle ≤ 1%			0.3	μ s

isc Silicon NPN Power Transistor

2SD2581

 I_C - V_{CE} Characteristics **I_C - V_{BE} Characteristics** **h_{FE} - I_C Characteristics** **$V_{CE(sat)}$ - I_C Characteristics****Power Derating****Safe Operating Area**