

INCHANGE Semiconductor

isc Product Specification

isc Silicon PNP Power Transistors

2SB613

DESCRIPTION

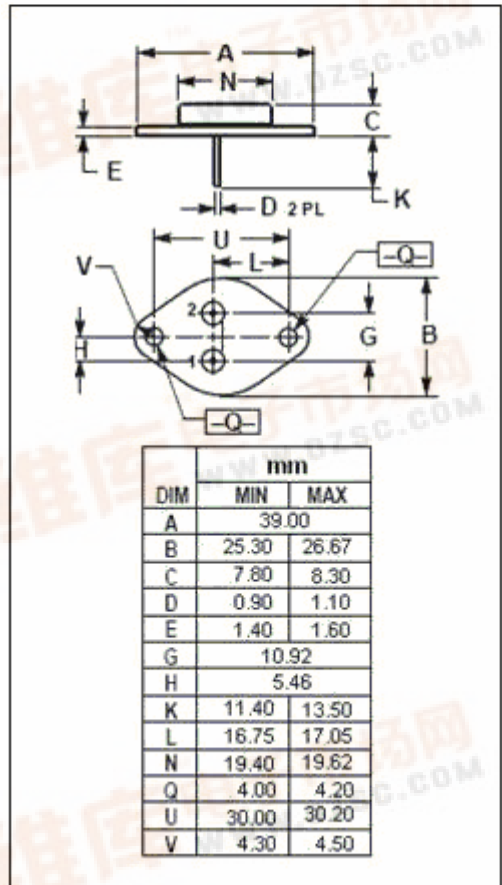
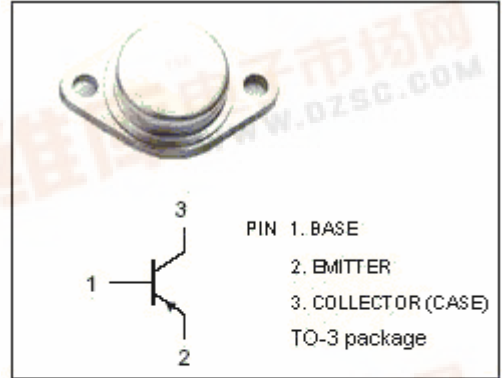
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -250V(\text{Min})$
- High Power Dissipation-
: $P_C = 150W(\text{Max})@T_C=25^\circ\text{C}$
- High Current Capability
- Complement to Type 2SD583

APPLICATIONS

- Designed for high power amplifier and switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-250	V
V_{CEO}	Collector-Emitter Voltage	-250	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
I_B	Base Current	-5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	150	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$



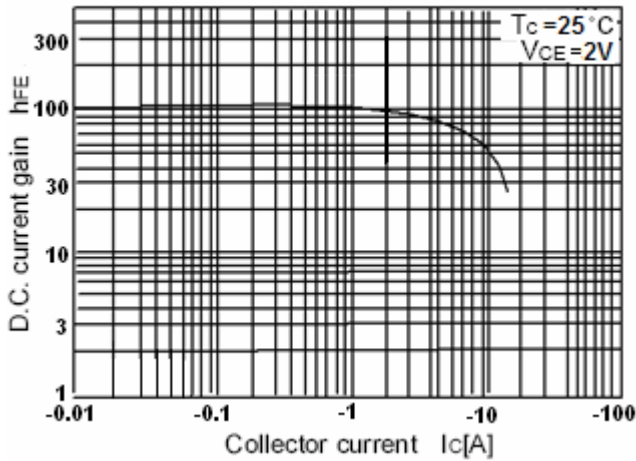
isc Silicon PNP Power Transistors**2SB613****ELECTRICAL CHARACTERISTICS**T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA ; I _B = 0	-250		V
V _{(BR)CBO}	Collector-Emitter Breakdown Voltage	I _C = -1mA ; I _E = 0	-250		
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E =-1mA ; I _C =0	-5		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1A		-3.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -250V; I _E = 0		-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0		-0.1	mA
h _{FE}	DC Current Gain	I _C = -1A ; V _{CE} = -2V	35	200	

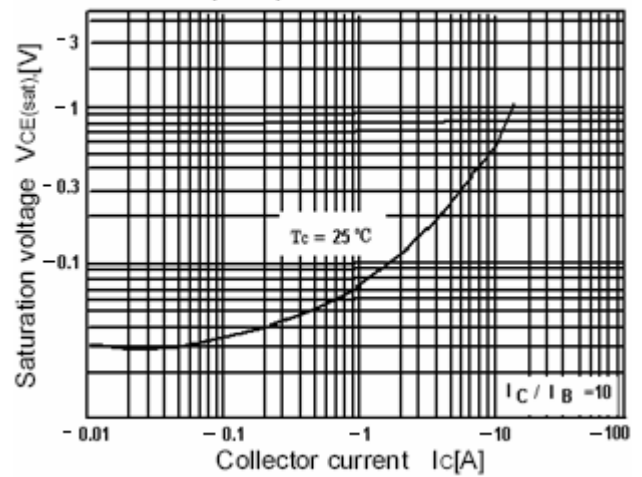
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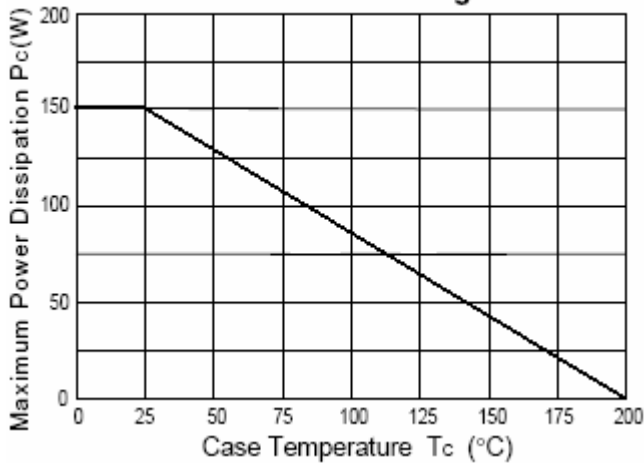
h_{FE} - I_C Characteristics



$V_{CE(sat)}$ - I_C Characteristics



Power Derating



Safe Operating Area

