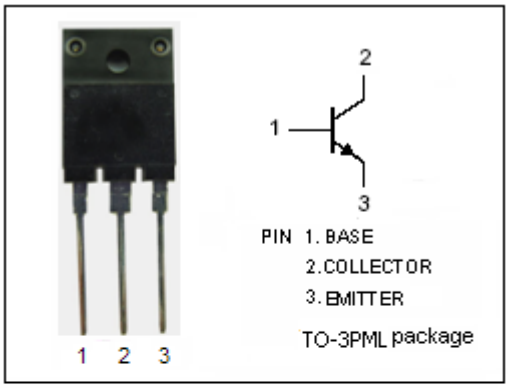
isc Silicon NPN Power Transistor 2SC4745

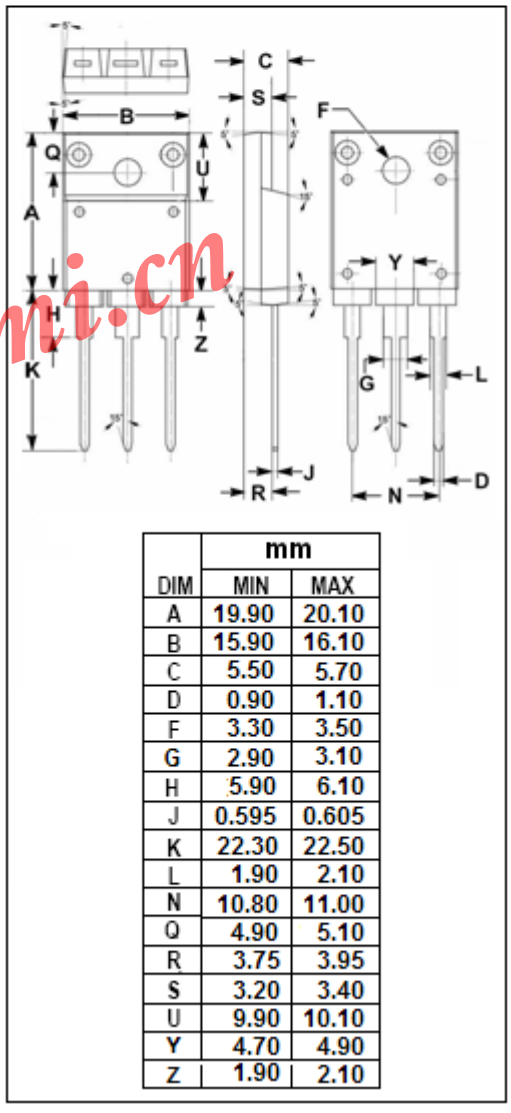


DESCRIPTION

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

APPLICATIONS

- Designed for character display horizontal deflection output stage applications



DIM	mm MIN	MAX
A	19.90	20.10
B	15.90	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
H	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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	6	A
$I_{C(peak)}$	Collector Current-Peak	7	A
$I_{C(surge)}$	Collector Current-Surge	16	A
P_C	Collector Power Dissipation @ T_C=25℃	50	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA ; R_{BE}= ∞	800			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 10mA ; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 1A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 1A			1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1500V ; R_{BE}= 0			500	μA
h_{FE}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	7		30	
t_f	Fall Time	I_{CP}= 5A , I_{B1}= 1A; f_H= 64kHz			0.4	μs

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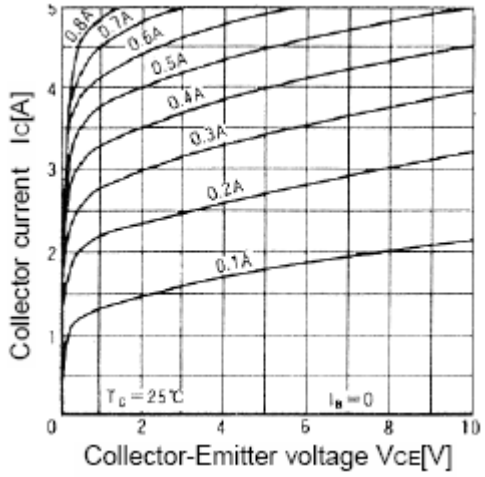
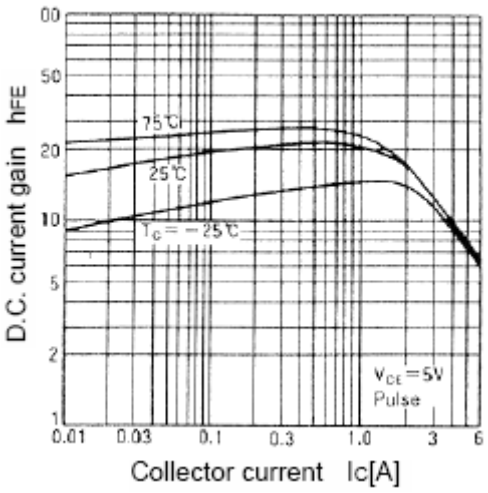
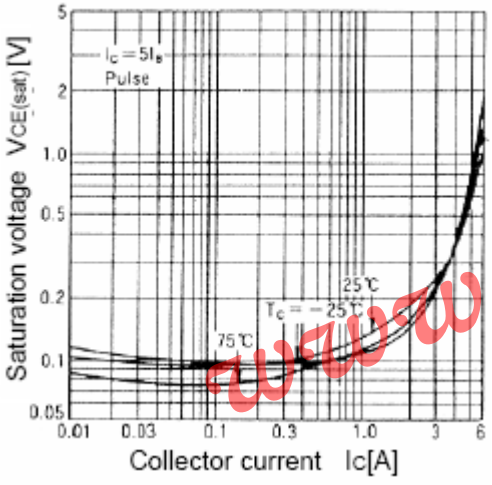
I_C–V_{CE} Characteristics



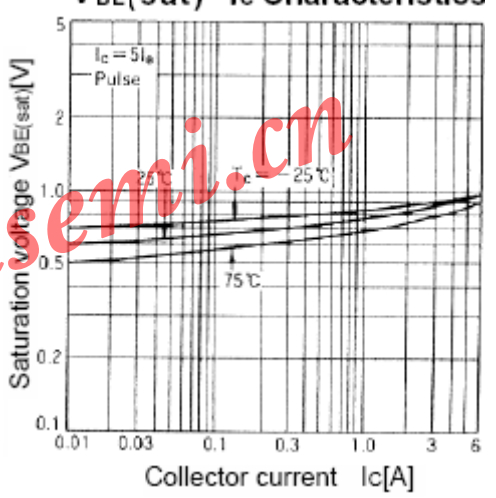
h_{FE}–I_C Characteristics



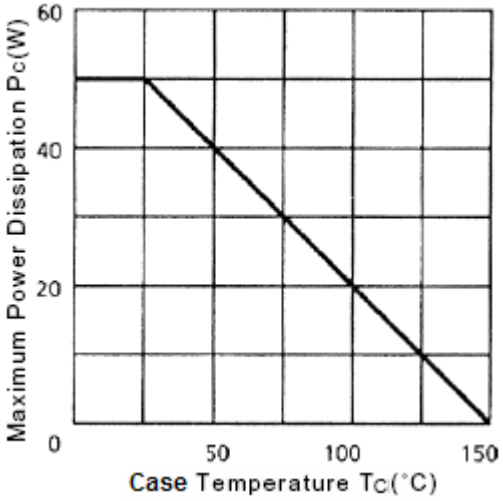
$V_{CE(sat)}$–I_C Characteristics



$V_{BE(sat)}$–I_C Characteristics



Power Derating



Safe Operating Area