

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

2SC4743

DESCRIPTION

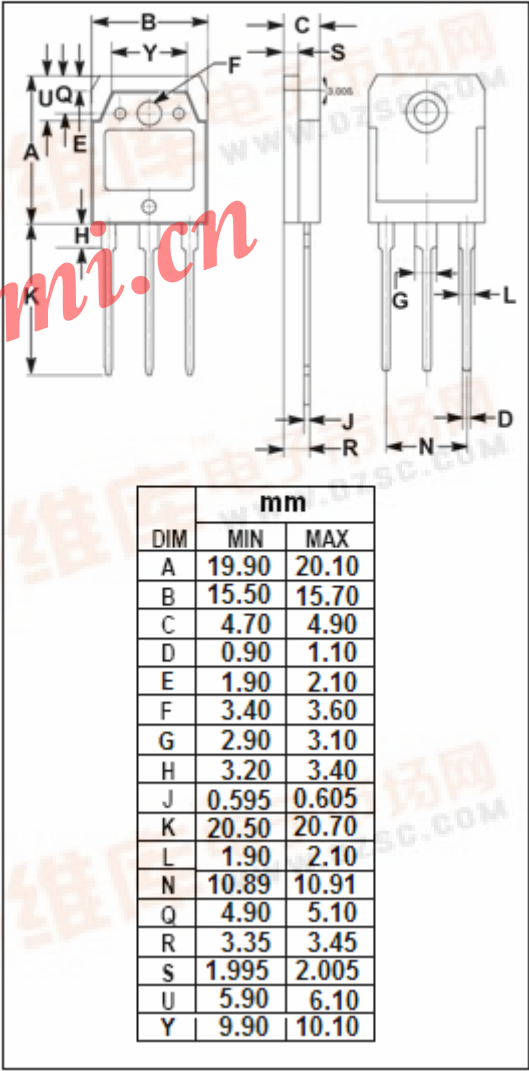
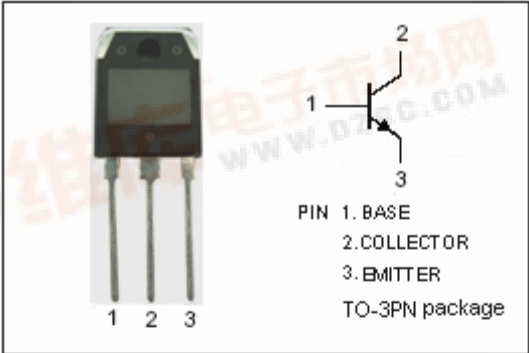
- High Breakdown Voltage-
: $V_{CBO}=1500V$ (Min)
- High Switching Speed

APPLICATIONS

- Designed for character display horizontal deflection output stage applications

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

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



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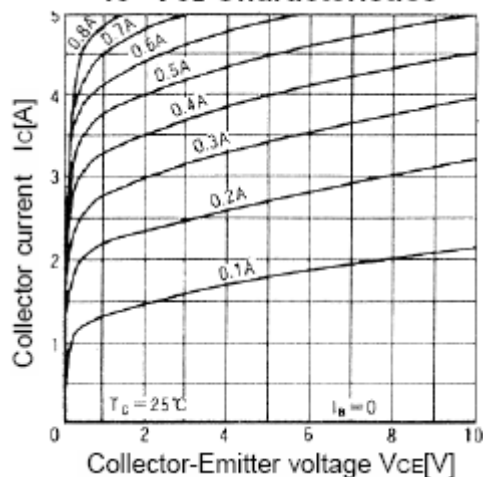
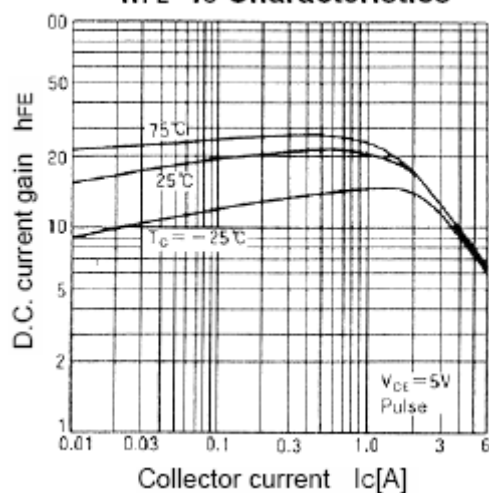
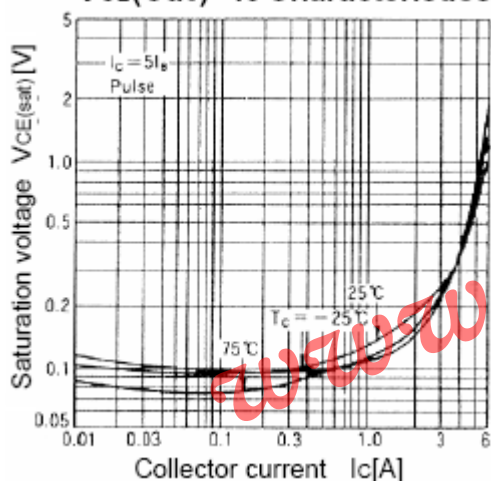
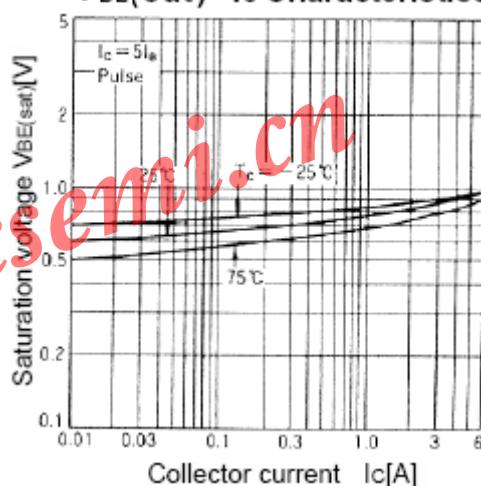
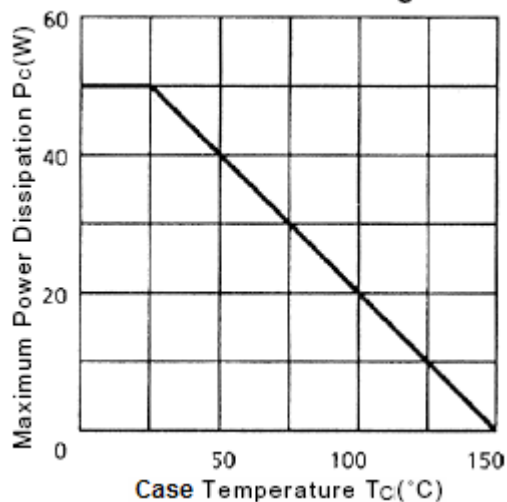
ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}$; $R_{BE}=\infty$	800			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=10\text{mA}$; $I_C=0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}$; $I_B=1.25\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}$; $I_B=1.25\text{A}$			1.5	V
I_{CES}	Collector Cutoff Current	$V_{CE}=1500\text{V}$; $R_{BE}=0$			500	μA
h_{FE}	DC Current Gain	$I_C=1\text{A}$; $V_{CE}=5\text{V}$	15		30	
t_f	Fall Time	$I_{CP}=5\text{A}$, $I_{B1}=1\text{A}$; $f_t=31.5\text{kHz}$			0.4	μs

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