

# NPN TRIPLE DIFFUSED PLANAR SILICON TRANSISTOR

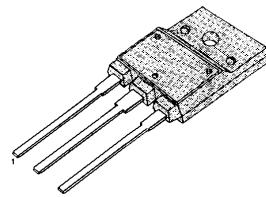
## COLOR TV HORIZONTAL OUTPUT APPLICATION (NO Damper Diode)

- High Collector-Base Voltage ( $V_{CBO}=1500V$ )
- High Speed Switching ( $t_f. \text{ max}=0.4\mu\text{s}$ )

## ABSOLUTE MAXIMUM RATING

Characteristic	Symbol	Rating	Unit
Collector- Base Voltage	$V_{CBO}$	1500	V
Collector- Emitter Voltage	$V_{CEO}$	800	V
Emitter- Base Voltage	$V_{EBO}$	6	V
Collector Current (DC)	$I_C$	2.5	A
Collector Current (Pulse)	$I_C$	10	A
Collector Dissipation ( $T_c=25^\circ\text{C}$ )	$P_C$	50	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ 150	$^\circ\text{C}$

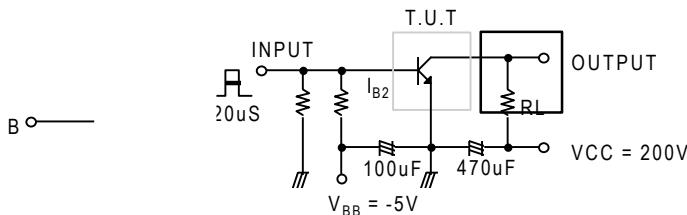
TO-3PF



1. Base 2. Collector 3. Emitter

## ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$ )

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 800V, I_E = 0$			10	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$			1	mA
DC Current Gain	$h_{FE}$	$V_{CE} = 5V, I_C = 0.5A$	8			
Collector Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C = 2A, I_B = 0.6A$			8	V
Base- Emitter Saturation Voltage	$V_{BE(\text{sat})}$	$I_C = 2A, I_B = 0.6A$			1.5	V
Current Gain Bandwidth Product	$f_T$	$V_{CE} = 10V, I_C = 0.5A$		3		MHz
Fall Time	$t_f$	$I_C = 2A, I_B1 = 0.6A$ $I_B2 = -1.2A, R_L = 100\Omega$			0.4	$\mu\text{s}$



Rev B.

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