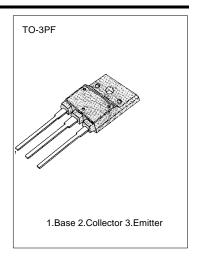
## NPN TRIPLE DIFFUSED PLANAR SILICON TRANSISTOR

### COLOR TV HORIZONTAL OUTPUT APPLICATION (DAMPER DIODE BUILT IN)

- High Collector-Base Voltage (V<sub>CBO</sub>=1500V)
- High Switching Speed (t<sub>F</sub>. max=0.4μs)

#### **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)	Ic	3.5	Α
Collector Current (Pulse)	Ic	10	Α
Collector Dissipation (T <sub>C</sub> =25°C)	Pc	50	W
Junction Temperature	TJ	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ 150	°C



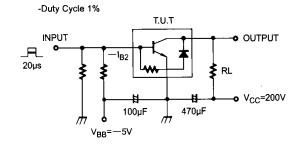
#### **ELECTRICAL CHARACTERISTICS** (T<sub>C</sub>=25°C)

Characteristic	Symbol	Test Condition	Min	Тур	Max	Unit
Collector Cutoff Current	I <sub>CBO</sub>	$V_{CB} = 800V, I_{E} = 0$			10	μΑ
Emitter Cutoff Current	I <sub>EBO</sub>	$V_{EB} = 4V, I_{C} = 0$	40		200	mA
DC Current Gain	h <sub>FE</sub>	$V_{CE} = 5V, I_{C} = 0.5A$	8			
Collector Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_C = 2.5A, I_B = 0.8A$			8	V
Base-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	$I_C = 2.5A, I_B = 0.8A$			1.5	V
Current Gain Bandwidth Product	f <sub>T</sub>	$V_{CE} = 10V, I_{C} = 0.5A$		3		MHz
Damper Diode Turn On Voltage	V <sub>F</sub>	I <sub>F</sub> = 3.5A			2	V
Fall Time	t <sub>F</sub>	$I_C = 3A$ , $I_B 1 = 0.8A$			0.4	μs
		$I_B 2 = -1.6A, V_{CC} = 200V$				
		$RL = 66.7\Omega$				

#### -EQUIVALENT CIRCUIT

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#### -SWITCHING TIME TEST CIRCUIT





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