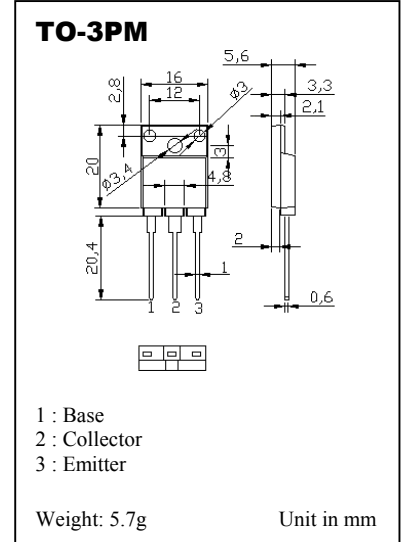


# NPN SILICON DIFFUSED POWER TRANSISTOR

... designed for horizontal deflection circuits of color television receivers.

## MAXIMUM RATINGS

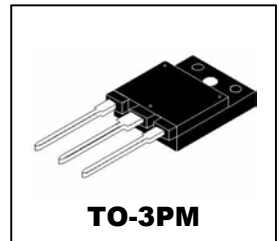
Characteristic	Symbol	Value	Unit
Collector Emitter Voltage (Open Base)	$V_{CEO}$	700	V
Collector Emitter Voltage (Peak)	$V_{CESM}$	1500	V
Collector Current (DC)	$I_C$	8	A
Collector Current (Peak)	$I_{CM}$	15	A
Base Current (DC)	$I_B$	4	A
Base Current (Peak)	$I_{BM}$	6	A
Total Power Dissipation $T_{hs} \leq 25^\circ C$	$P_{tot}$	34	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-65 ~ 150	$^\circ C$



## ELECTRICAL CHARACTERISTICS ( $T_{hs} = 25^\circ C$ )

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cutoff Current	$I_{CES}$	$V_{BE}=0, V_{CE}=V_{CESmax}$ $V_{BE}=0, V_{CE}=V_{CESmax},$ $T_j=125^\circ C$	-	-	1	mA
			-	-	2	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=6V, I_C=0$	-	-	10	mA
DC Current Gain	$h_{FE}$	$V_{CE}=5A, I_C=100mA$	6	13	30	-
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_B=1.6A, I_C=4.5A$	-	-	1	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_B=2A, I_C=4.5A$	-	-	1.1	V
Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_B=0, I_C=100mA, L=25mH$	700	-	-	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=0.1A, f=5MHz$	-	7	-	MHz
Collector Capacitance	$C_c$	$V_{CB}=10V, f=1MHz$	-	125	-	pF
Switching Time		$I_{C(sat)}=4.5A, L_c=1mH,$				
Turn Off Storage Time	$t_s$	$C_{fb}=4nF, I_{B(end)}=1.4A,$	-	6.5	-	$\mu s$
Turn Off Fall Time	$t_f$	$L_B=6\mu H, V_{BB}=4V,$ $I_{BM}=-2.25A$	-	0.7	-	$\mu s$

**NPN SILICON  
DIFFUSED POWER  
TRANSISTOR**



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