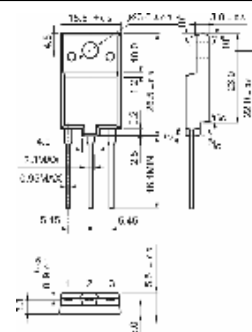


**2SD2253****Silicon NPN Triple Diffused Power Transistor****GENERAL DESCRIPTION**

HORIZONTAL DEFLECTION OUTPUT FOR HIGH
RESOLUTION DISPLAY, COLOR TV
High Speed Switching Applications



TO-3PM

**QUICK REFERENCE DATA**

SYMBOL	PARAMETER	CONDITIONS	TYP	MAX	UNIT
V_{CB0}	Collector-Base voltage		-	1700	V
V_{CEO}	Collector-emitter voltage (open base)		-	600	V
I_C	Collector current (DC)		-	6	A
I_{CM}	Collector current peak value		-	12	A
P_{tot}	Total power dissipation	$T_{mb} \leq 25^\circ\text{C}$	-	50	W
V_{CEsat}	Collector-emitter saturation voltage	$I_C = 5.0\text{A}; I_B = 1.0\text{A}$	-	5	V
V_F	Diode forward voltage	$I_F = 6.0\text{A}$	1.6	2.0	V
t_f	Fall time	$I_{Csat} = 6.0\text{A}; f = 16\text{KHz}$	0.3	0.7	μs

LIMITING VALUES

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CB0}	Collector-Base voltage		-	1700	V
V_{CEO}	Collector-emitter voltage (open base)		-	600	V
I_C	Collector current (DC)		-	6	A
I_{CM}	Collector current peak value		-	12	A
I_B	Base current (DC)		-	3	A
I_{BM}	Base current peak value		-		A
P_{tot}	Total power dissipation	$T_{mb} \leq 25^\circ\text{C}$	-	50	W
T_{sta}	Storage temperature		-55	150	$^\circ\text{C}$
T_j	Junction temperature		-	150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	TYP	MAX	UNIT
I_{CEO}	Collector cut-off current	$V_{CB} = 1700\text{V}; I_E = 0$	-	1.0	mA
V_{CEsat}	Collector-emitter saturation voltages	$I_C = 5.0\text{A}; I_B = 1.0\text{A}$	-	5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C = 5.0\text{A}; I_B = 1.0\text{A}$	-	1.2	V
h_{FE}	DC current gain	$I_C = 1\text{A}; V_{CE} = 5\text{V}$	8	28	
V_F	Diode forward voltage	$I_F = 6.0\text{A}$	1.6	2.0	V
f_T	Transition frequency	$I_C = 0.1\text{A}; V_{CE} = 10\text{V}$	1	-	MHz
t	Turn-off storage time				
t_f	Turn-off fall time	$I_C = 6\text{A}, I_{B(end)} = 1.5\text{A}$	0.3	0.7	μs