



# NPN TRIPLE DIFFUSED PLANAR SILICON TRANSISTOR

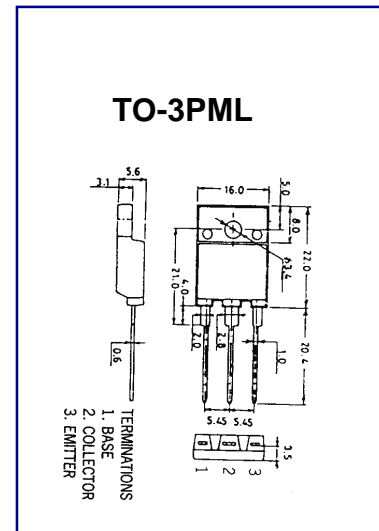
## 2SD1651

**COLOR TV HORIZONTAL OUTPUT  
APPLICATIONS(Damper Diode BUILT IN)**

- High Collector-Base Voltage( $V_{CBO}=1500V$ )
- High Speed Switching

### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ C$ )

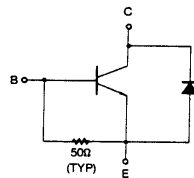
Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	1500	V
Collector-Emitter Voltage	$V_{CEO}$	1500	V
Emitter-Base voltage	$V_{EBO}$	6	V
Collector Current (DC)	$I_C$	5	A
Collector Dissipation ( $T_c=25^\circ C$ )	$P_C$	50	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-50~150	$^\circ C$



### ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ C$ )

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector- Emitter Cutoff Current( $V_{BE}=0$ )	$I_{CES}$	$V_{CE}=1400V$ ,			1.0	mA
Collector Cutoff Current	$I_{CBO}$	$R_{BE}=0$			10	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{CB}=800V$ , $I_E=0$			1.0	mA
DC Current Gain	$h_{FE}$	$V_{EB}=4V$ , $I_C=0$	8			
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$V_{CE}=5V$ , $I_C=1A$ $I_C=4A$ , $I_B=0.8A$			5.0	V

-EQUIVALENT CIRCUIT



-SWITCHING TIME TEST CIRCUIT

