

# 深圳市晶泰源电子有限公司

HIGH-DEFINITION CRT DISPLAY  
VIDEO OUTPUT APPLICATION.

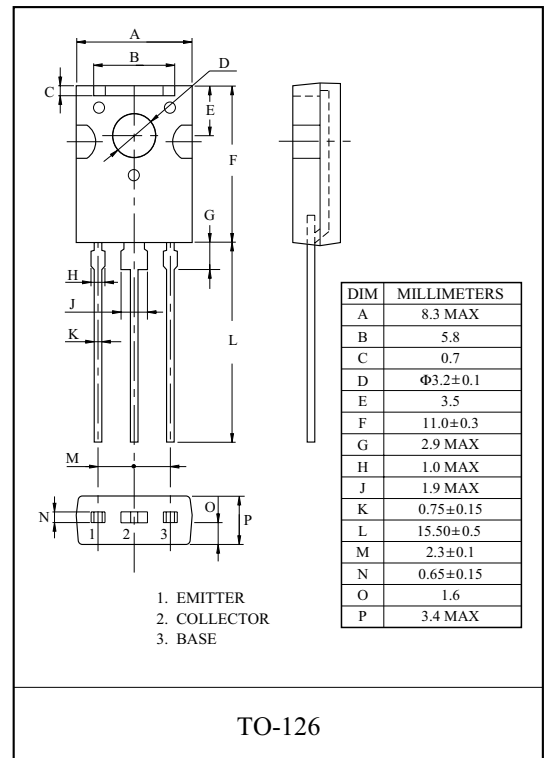
## EPITAXIAL PLANAR NPN TRANSISTOR

### FEATURES

- High Voltage :  $V_{CE0}=200V$ .
- High Transition Frequency :  $f_T=150MHz(Typ.)$ .
- Low Collector Output Capacitance :  $C_{ob}=1.7pF(Typ.)$ .

### MAXIMUM RATING ( $T_a=25^\circ C$ )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	200	V
Collector-Emitter Voltage		$V_{CEO}$	200	V
Emitter-Base Voltage		$V_{EBO}$	5	V
Collector Current	DC	$I_C$	100	mA
	Pulse	$I_{cp}$	200	
Collector Power Dissipation	$T_a=25^\circ C$	$P_C$	1.5	W
	$T_c=25^\circ C$		5	
Junction Temperature		$T_j$	150	$^\circ C$
Storage Temperature Range		$T_{stg}$	-55 ~ 150	$^\circ C$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=150V, I_E=0$	-	-	0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=4V, I_C=0$	-	-	0.1	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	200	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=10mA$	70	-	240	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=20mA, I_B=2mA$	-	-	0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=20mA, I_B=2mA$	-	-	1.0	V
Transition Frequency	$f_T$	$V_{CE}=30V, I_C=10mA$	-	150	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=30V, I_E=0, f=1MHz$	-	1.7	-	pF
Reverse Transfer Capacitance	$C_{re}$	$V_{CB}=30V, f=1MHz$	-	1.2	-	pF

Note :  $h_{FE}$  Classification O:70 ~ 140 , Y:120 ~ 240