TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

# 2 S C 2 0 7 3 A

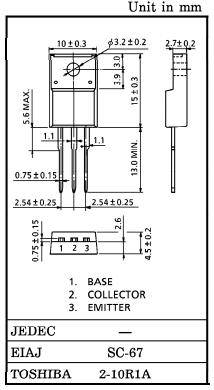
### **POWER AMPLIFIER APPLICATIONS**

#### **VERTICAL OUTPUT APPLICATIONS**

- Wide Safe Operating Area.
- Complementary to 2SA940A

## MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		$v_{CBO}$	150	V	
Collector-Emitter Voltage		$V_{CEO}$	150	V	
Emitter-Base Voltage		$ m v_{EBO}$	5	V	
Collector Current		$I_{\mathbf{C}}$	1.5	Α	
Base Current		$I_{\mathbf{B}}$	0.5	Α	
Collector Power	Ta=25°C	Da	2.0	w	
Dissipation	Tc=25°C	$_{ m PC}$	25	] **	
Junction Temperature		$T_{\mathrm{j}}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C	



Weight: 1.7g

#### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	ICBO	$V_{CB} = 120V, I_{E} = 0$	_	_	10	$\mu$ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=5V, I_{C}=0$	_	_	10	$\mu$ A
DC Current Gain	${ m h_{FE}}$	$V_{CE} = 10V, I_{C} = 500 \text{mA}$	40	75	140	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_{\rm C} = 500 {\rm mA}, \ I_{\rm B} = 50 {\rm mA}$	_	_	1.5	V
Base-Emitter Voltage	$V_{ m BE}$	$V_{CE} = 10V, I_{C} = 500 \text{mA}$	0.65	0.75	0.85	V
Transition Frequency	$f_{\mathrm{T}}$	$V_{CE} = 10V, I_{C} = 500 \text{mA}$	_	4	_	MHz
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = 10V, I_E = 0, f = 1MHz$	_	35	_	рF

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