**TOSHIBA** 2SC5563

#### **TENTATIVE**

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

# 2 S C 5 5 6 3

#### DYNAMIC FOCUS APPLICATIONS

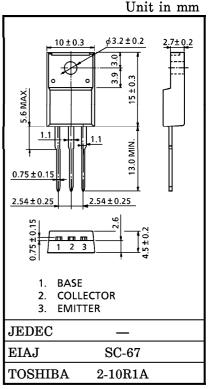
High Voltage :  $V_{CEO} = 1500 \text{ V}$ 

Small Collector Output Capacitance :  $C_{ob} = 2.0 \, pF$  (Typ.)

 $(V_{CB} = 100 V)$ 

## MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		$V_{CBO}$	1500	V	
Collector-Emitter Voltage		$v_{CEO}$	1500	V	
Emitter-Base Voltage		$v_{\mathrm{EBO}}$	7	V	
Collector Current	DC	$I_{\mathbf{C}}$	20	mA	
	Pulse	$I_{CP}$	40		
Base Current		$I_{\mathrm{B}}$	10	mA	
Collector Power	$Tc = 25^{\circ}C$	Da	10	w	
Dissipation	$Ta = 25^{\circ}C$	$_{ m PC}$	2		
Junction Temperature		$T_{j}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C	



Weight: 1.7 g

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 1500 \text{ V}, I_{E} = 0$	_	_	1	$\mu$ A
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 7 V, I_{C} = 0$	_	_	10	$\mu$ <b>A</b>
Collector-Base Breakdown Voltage	V (BR) CBO	$I_{\rm C} = 0.1  {\rm mA}, \; I_{\rm B} = 0$	1500	_	_	V
Collector-Emitter Breakdown Voltage	V <sub>(BR)</sub> CEO	$I_{\mathrm{C}} = 1  \mathrm{mA},  I_{\mathrm{B}} = 0$	1500	_	_	V
DC Current Gain	$h_{ extbf{FE}}$	$V_{CE} = 5 \text{ V}, I_{C} = 1 \text{ mA}$	10	_	60	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_{\mathrm{C}}=10\mathrm{mA},~I_{\mathrm{B}}=2\mathrm{mA}$	_	_	5.0	V
Base-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	$I_{\mathrm{C}}=10\mathrm{mA},~I_{\mathrm{B}}=2\mathrm{mA}$	_	_	1.3	V
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = 100 \text{ V}, \text{ f} = 1 \text{ MHz}, I_{E} = 0$	_	2.0	_	pF

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