

# TOSHIBA

2SC5563

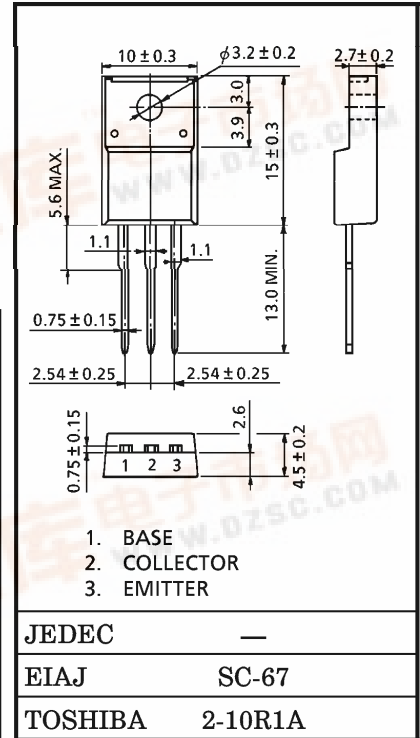
TENTATIVE TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

## 2SC5563

DYNAMIC FOCUS APPLICATIONS

- High Voltage :  $V_{CEO} = 1500\text{ V}$
- Small Collector Output Capacitance :  $C_{ob} = 2.0\text{ pF (Typ.)}$   
( $V_{CB} = 100\text{ V}$ )

Unit in mm



MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	1500	V
Collector-Emitter Voltage		$V_{CEO}$	1500	V
Emitter-Base Voltage		$V_{EBO}$	7	V
Collector Current	DC	$I_C$	20	mA
	Pulse	$I_{CP}$	40	
Base Current		$I_B$	10	mA
Collector Power Dissipation	$T_c = 25^\circ\text{C}$	$P_C$	10	W
	$T_a = 25^\circ\text{C}$		2	
Junction Temperature		$T_j$	150	$^\circ\text{C}$
Storage Temperature Range		$T_{stg}$	-55~150	$^\circ\text{C}$

Weight : 1.7 g

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 1500\text{ V}, I_E = 0$	—	—	1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 7\text{ V}, I_C = 0$	—	—	10	$\mu\text{A}$
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{ mA}, I_B = 0$	1500	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, I_B = 0$	1500	—	—	V
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{ V}, I_C = 1\text{ mA}$	10	—	60	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{ mA}, I_B = 2\text{ mA}$	—	—	5.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{ mA}, I_B = 2\text{ mA}$	—	—	1.3	V
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 100\text{ V}, f = 1\text{ MHz}, I_E = 0$	—	2.0	—	pF

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