Unit in mm

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2 S C 5 3 6 0

COLOR TV CHROMA OUTPUT APPLICATIONS

• High Voltage : V_{CEO}=300V

• Small Collector Output Capacitance : Coh=5.0pF (Typ.)

• High Transition Frequency : f_T=100MHz (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		v_{CBO}	300	V	
Collector-Emitter Voltage		v_{CEO}	300	V	
Emitter-Base Voltage		$v_{ m EBO}$	5	V	
Collector Current		$I_{\mathbf{C}}$	150	mA	
Base Current		IB	50	mA	
Collector Power	Ta = 25°C	Da	2.0	w	
Dissipation	Tc=25°C	$P_{\mathbf{C}}$	12.5		
Junction Temperature		$T_{ m j}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	$^{\circ}\mathrm{C}$	

1. BASE 2. COLLECTOR 3. EMITTER JEDEC EIAJ SC-67 TOSHIBA 2.7±0.2 2.7±

Weight: 1.7g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 240V, I_{E} = 0$	_	_	1.0	μ A
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_{C}=0$	_	_	1.0	μ A
Collector-Emitter Breakdown Voltage	V _(BR) CEO	$I_{\rm C}$ =5mA, $I_{\rm B}$ =0	300	_	_	V
DC Current Gain	$h_{ extbf{FE}}$	$V_{CE} = 10V, I_{C} = 50mA$	40	_	170	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	I _C =100mA, I _B =20mA	_	_	1.0	V
Base-Emitter Saturation Voltage	V _{BE} (sat)	I _C =100mA, I _B =20mA	_	_	1.2	V
Transition Frequency	${ m f_T}$	$V_{CE} = 10V, I_{C} = 30mA$	40	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 50V, I_{E} = 0, f = 1MHz$	_	5.0	6.5	pF

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