

TENTATIVE

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

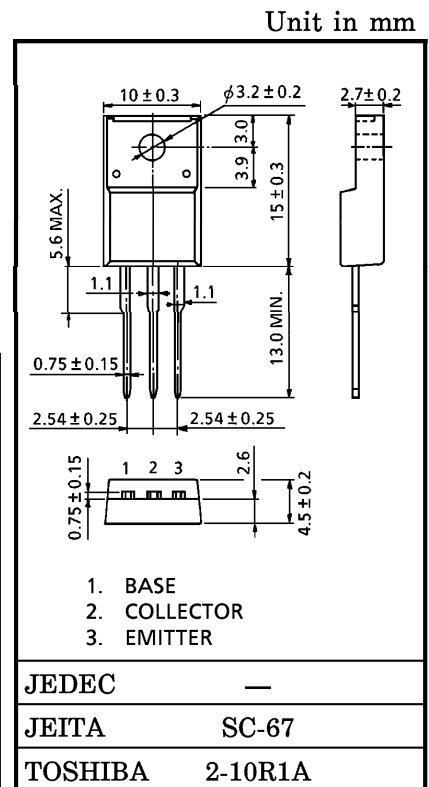
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DYNAMIC FOCUS APPLICATIONS

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

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

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	$T_c = 25^\circ\text{C}$	PC	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 (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 1500\text{ V}, I_E = 0$	—	—	1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 7\text{ V}, I_C = 0$	—	—	10	μA
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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