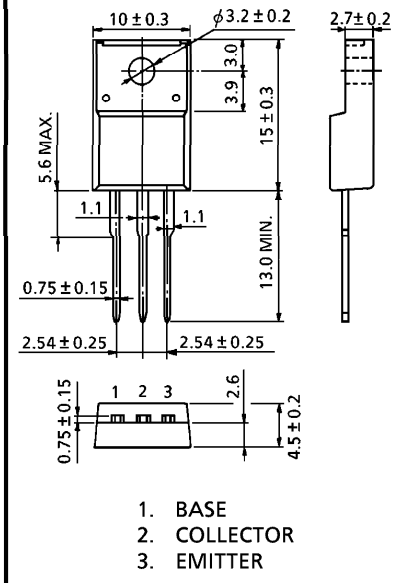
TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1887

HIGH CURRENT SWITCHING APPLICATIONS

Unit in mm

- Low Collector Saturation Voltage
  : $V_{CE\ (sat)} = -0.4V$ (Max.) at $I_C = -5A$



JEDEC	—
JEITA	SC-67
TOSHIBA	2-10R1A

Weight : 1.7g (Typ.)

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	−80	V
Collector-Emitter Voltage		V_{CEO}	−50	V
Emitter-Base Voltage		V_{EBO}	−7	V
Collector Current		I_C	−10	A
Collector Power Dissipation	Ta = 25°C	P_C	2.0	W
	Tc = 25°C		25	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = -70V$, $I_E = 0$	—	—	−1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = -7V$, $I_C = 0$	—	—	−1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)\ CEO}$	$I_C = -10mA$, $I_B = 0$	−50	—	—	V
DC Current Gain		h_{FE}	$V_{CE} = -1V$, $I_C = -1A$	120	—	400	
Saturation Voltage	Collector-Emitter	$V_{CE\ (sat)}$	$I_C = -5A$, $I_B = -0.25A$	—	−0.2	−0.4	V
	Base-Emitter	$V_{BE\ (sat)}$	$I_C = -5A$, $I_B = -0.25A$	—	−0.95	−1.4	
Transition Frequency		f_T	$V_{CE} = -1V$, $I_C = -1A$	—	45	—	MHz
Collector Output Capacitance		C_{ob}	$V_{CB} = -10V$, $I_E = 0$, f = 1MHz	—	215	—	pF

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