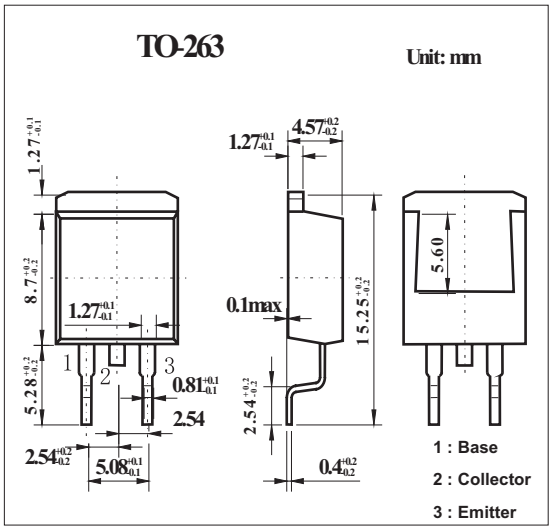
2SD2414



■ Features

- Low Saturation Voltage:$V_{CE(sat)}$=0.5V(Max.)(at IC=4A)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	100	V
Collector-emitter voltage	V_{CEO}	80	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	7	A
Base current	I_B	1	A
Collector power dissipation	P_C	1.5	W
TC=25℃		40	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +125	℃

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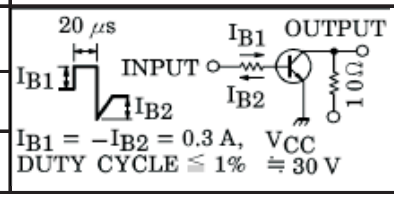
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = 100 V, I_E = 0			5	μA
Emitter cut-off current	I_{EBO}	V_{EB} = 5 V, I_C = 0			5	mA
Collector-emitter sustaining voltage	V_{CEO}	I_C = 50 mA, I_B=0	80			V
DC current gain	h_{FE}	V_{CE} = 1 V, I_C = 1 A	100		320	
		V_{CE} = 1 V, I_C = 4 A	30			
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C = 4A, I_B = 0.4A		0.25	0.5	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C =4A, I_B = 0.4A		0.9	1.4	V
Transition frequency	fT	V_{CE}=4V,I_C=1A		10		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		200		pF
Storage time Turn-on Time	t_{on}			0.4		μs
Storage time Storage Time	t_{stg}			2.5		
Storage time Fall Time	t_f			0.5		