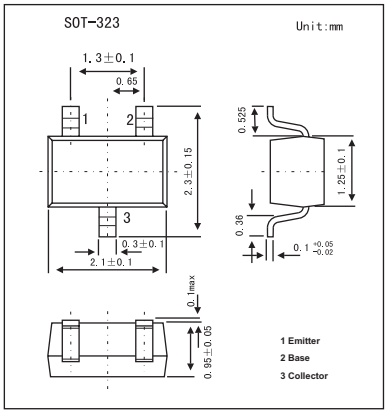
NPN General Purpose Transistor

2PD601AW



■ Features

- High collector current (max. 100 mA)
- Low collector-emitter saturation voltage (max. 500 mV).

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	6	V
Collector current	I_C	100	mA
Peak collector current	I_{CM}	200	mA
Total power dissipation	P_{tot}	200	mW
Storage temperature	T_{stg}	-65 to +150	℃
Junction temperature	T_j	150	℃
Operating ambient temperature	T_{amb}	-65 to +150	℃
Thermal resistance from junction to ambient	$R_{th\ j\text{-}a}$	625	K/W

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	I_E = 0; V_{CB} = 60 V			10	nA
		I_E = 0; V_{CB} = 60 V; T_j = 150 ℃			5	μA
Emitter cut-off current	I_{EBO}	I_C = 0; V_{EB} = 5 V			10	nA
DC current gain 2PD601AQW 2PD601ARW 2PD601ASW	h_{FE}	I_C = 2 mA; V_{CE} = 10 V	 160 210 290		 260 340 460	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 100 mA; I_B = 10 mA; *			500	mV
Collector capacitance	C_c	I_E = ie = 0; V_{CB} = 10 V; f = 1 MHz			3.5	pF
Transition frequency 2PD601AQW 2PD601ARW 2PD601ASW	f_T	I_C = 2 mA; V_{CE} = 10 V;f = 100 MHz	 100 120 140			MHz

* Pulse test: tp ⩽ 300 μs; δ ⩽ 0.02.

■ h_{FE} Classification

TYPE	2PD601AQW	2PD601ARW	2PD601ASW
Marking	6D	6E	6F