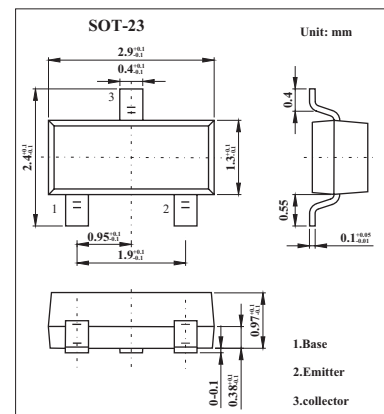


NPN General Purpose Transistor

2PD601A

■ Features

- Low current (max. 100 mA)
- Low voltage (max. 50 V).

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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 (DC)	I_C	100	mA
Peak collector current	I_{CM}	200	mA
Peak base current	I_{BM}	100	mA
Total power dissipation $T_{amb} \leq 25^\circ\text{C}; *$	P_{tot}	250	mW
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$
Junction temperature	T_j	150	$^\circ\text{C}$
Operating ambient temperature	T_{amb}	-65 to +150	$^\circ\text{C}$
Thermal resistance from junction to ambient *	$R_{th\ j-a}$	500	K/W

* Transistor mounted on an FR4 printed-circuit board.

2PD601A

■ Electrical Characteristics Ta = 25°C

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°C			5	μA
Emitter cut-off current	I _{EBO}	I _C = 0; V _{EB} = 5 V			10	nA
DC current gain	2PD601AQ	I _C = 2 mA; V _{CE} = 10 V; *	160		260	
	2PD601AR		210		340	
	2PD601AS		290		460	
DC current gain	h _{FE}	I _C = 100 mA; V _{CE} = 2 V;	90			
Collector-emitter saturation voltage	V _{CEsat}	I _C = 100 mA; I _B = 10 mA; *			500	mV
Collector capacitance	C _c	I _E = i _e = 0; V _{CB} = 10 V; f = 1 MHz			3.5	pF
Transition frequency	2PD601AQ	I _C = 2 mA; V _{CE} = 10 V; f = 100 MHz *	100			MHz
	2PD601AR		120			
	2PD601AS		140			

* Pulse test: t_p ≤ 300 μs; δ ≤ 0.02.

■ Marking

Type Number	2PD601AQ	2PD601AR	2PD601AS
Marking	ZQ	ZR	ZS