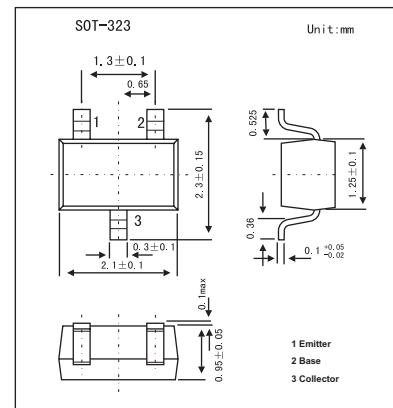


## NPN General Purpose Transistor

## 2PD601AW

## ■ Features

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

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	60	V
Collector-emitter voltage	$V_{CE0}$	50	V
Emitter-base voltage	$V_{EB0}$	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	$^\circ\text{C}$
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	$R_{th\ j-a}$	625	K/W

**2PD601AW**■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I <sub>CBO</sub>	I <sub>E</sub> = 0; V <sub>CB</sub> = 60 V			10	nA
		I <sub>E</sub> = 0; V <sub>CB</sub> = 60 V; T <sub>j</sub> = 150 °C			5	μA
Emitter cut-off current	I <sub>EBO</sub>	I <sub>C</sub> = 0; V <sub>EB</sub> = 5 V			10	nA
DC current gain 2PD601AQW 2PD601ARW 2PD601ASW	h <sub>FE</sub>	I <sub>C</sub> = 2 mA; V <sub>CE</sub> = 10 V	160 210 290		260 340 460	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 100 mA; I <sub>B</sub> = 10 mA; *			500	mV
Collector capacitance	C <sub>c</sub>	I <sub>E</sub> = i <sub>e</sub> = 0; V <sub>CB</sub> = 10 V; f = 1 MHz			3.5	pF
Transition frequency 2PD601AQW 2PD601ARW 2PD601ASW	f <sub>T</sub>	I <sub>C</sub> = 2 mA; V <sub>CE</sub> = 10 V; f = 100 MHz	100 120 140			MHz

\* Pulse test:  $t_p \leq 300 \mu\text{s}$ ;  $\delta \leq 0.02$ .

■ h<sub>FE</sub> Classification

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