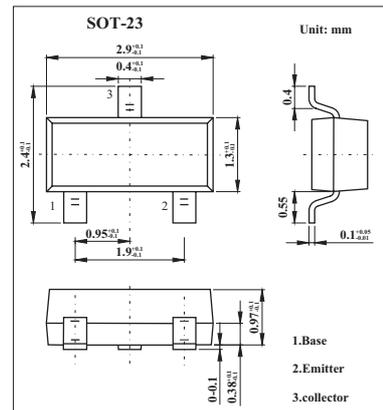


2PD602A

■ Features

- High current (max. 500 mA)
- Low voltage (max. 50 V).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	60	V
Collector-emitter voltage	V _{CEO}	50	V
Emitter-base voltage	V _{EB0}	5	V
Collector current (DC)	I _c	500	mA
Peak collector current	I _{CM}	1	A
Peak base current	I _{BM}	200	mA
Total power dissipation T _{amb} ≤ 25°C; *	P _{tot}	250	mW
Storage temperature	T _{stg}	-65 to +150	°C
Junction temperature	T _j	150	°C
Operating ambient temperature	T _{amb}	-65 to +150	°C
Thermal resistance from junction to ambient *	R _{th j-a}	500	K/W

* Transistor mounted on an FR4 printed-circuit board.

2PD602A

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

Parameter	Symbol	Testconditions	Min	Max	Unit	
Collector cut-off current	I_{CBO}	$I_E = 0; V_{CB} = 60\text{ V}$		10	nA	
		$I_E = 0; V_{CB} = 60\text{ V}; T_j = 150^\circ\text{C}$		5	μA	
Emitter cut-off current	I_{EBO}	$I_C = 0; V_{EB} = 4\text{ V}$		10	nA	
DC current gain	hFE	$I_C = 150\text{ mA}; V_{CE} = 10\text{ V}; *$	2PD602AQ	85	170	
			2PD602AR	120	240	
			2PD602AS	170	340	
DC current gain	hFE	$I_C = 500\text{ mA}; V_{CE} = 10\text{ V}; *$				
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 300\text{ mA}; I_B = 30\text{ mA}; *$		600	mV	
Collector capacitance	C_c	$I_E = i_e = 0; V_{CB} = 10\text{ V}; f = 1\text{ MHz}$		15	pF	
Transition frequency	f _T	$I_C = 50\text{ mA}; V_{CE} = 10\text{ V}; f = 100\text{ MHz} *$	2PD602AQ	140		MHz
			2PD602AR	160		
			2PD602AS	180		

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

■ Marking

Type Number	2PD602AQ	2PD602AR	2PD602AS
hFE	XQ	XR	XS