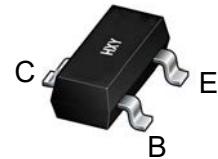




## Features

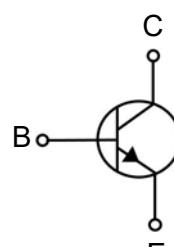
BVCEO > 60V.  
IC = 1A Continuous Collector Current.  
ICM = 2A Peak Pulse Current.  
500mW Power Dissipation.  
h<sub>FE</sub> Characterized up to 2A for High Current Gain Hold Up.



**SOT-23**

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2PD602AQL	SOT-23	491	3000



## Maximum Ratings (Ta=25°C unless otherwise noted)

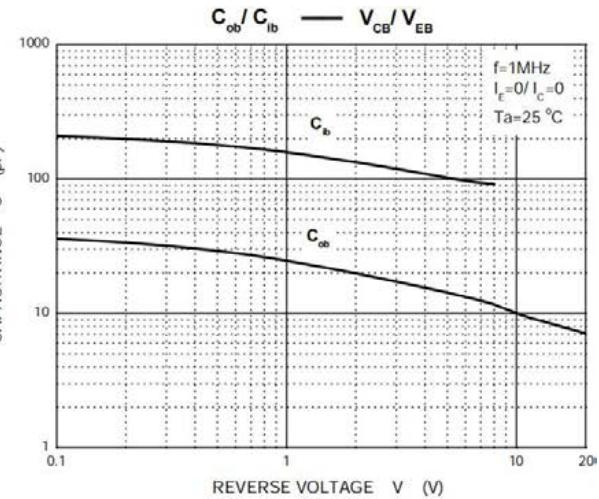
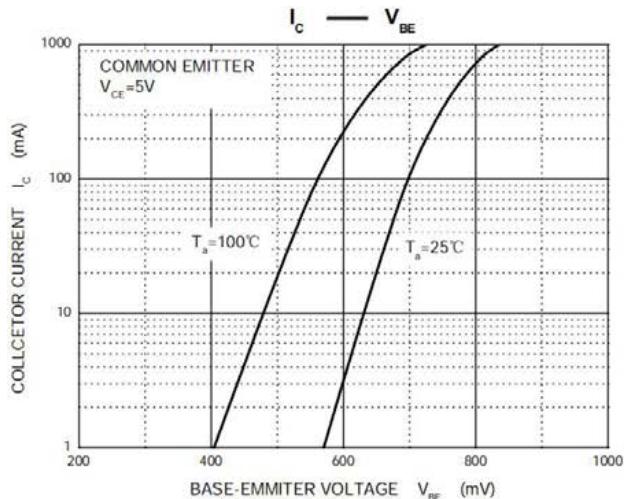
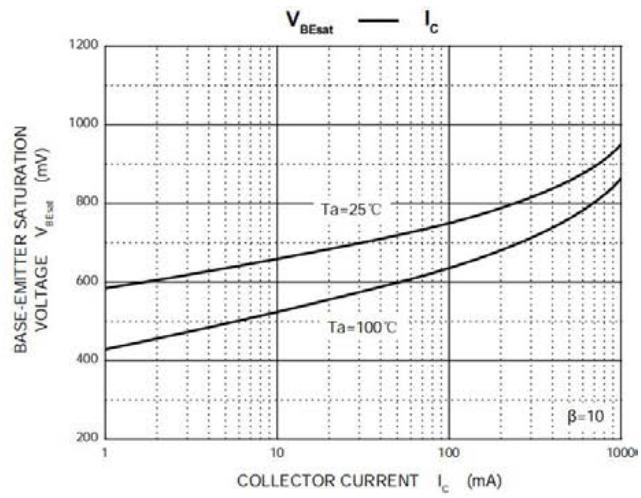
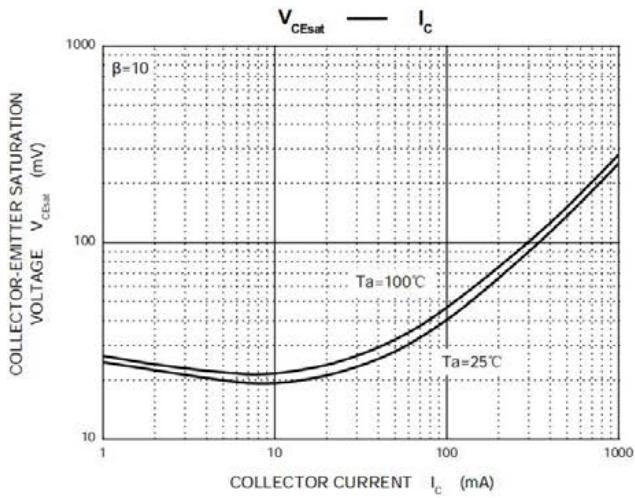
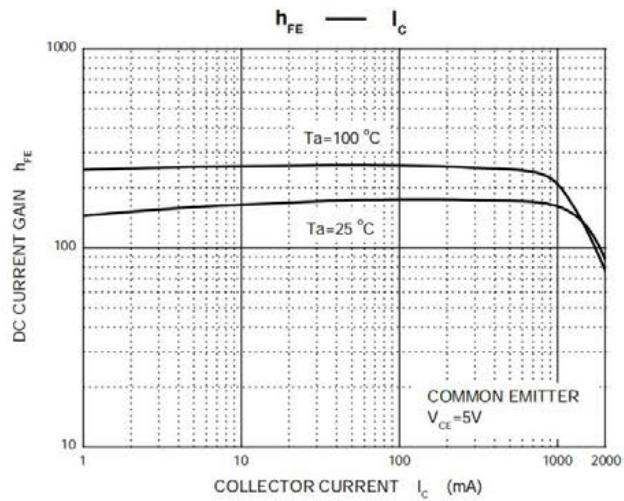
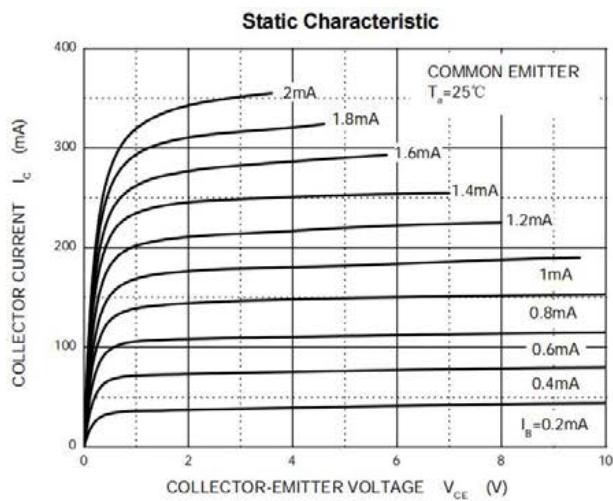
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	80	V
V <sub>CEO</sub>	Collector-Emitter Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	1	A
I <sub>CM</sub>	Peak Pulse Current	2	A
P <sub>C</sub>	Collector Power Dissipation	250	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	500	°C/W
T <sub>J</sub> , T <sub>stg</sub>	Operation Junction And Storage Temperature Range	-55~+150	°C

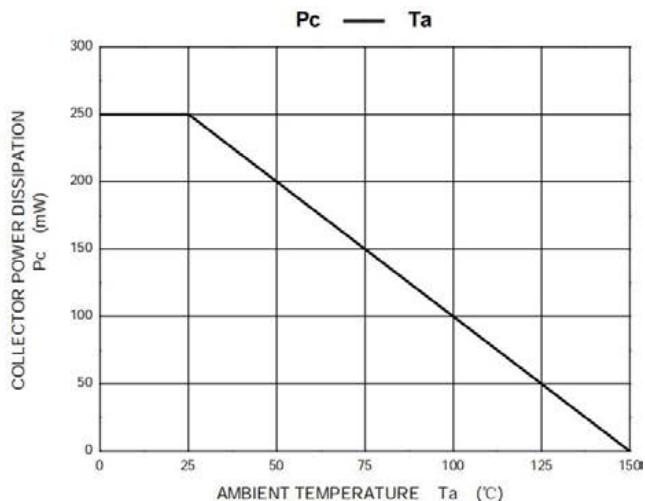
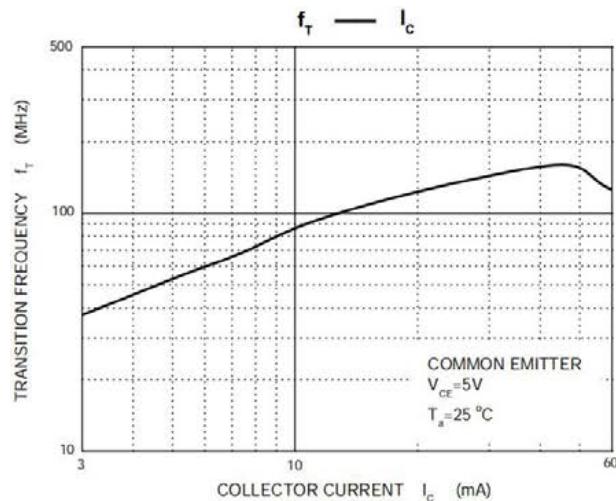
## Electrical Characteristics (Ta=25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =100μA, I <sub>E</sub> =0	80			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =0	60			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =100μA, I <sub>C</sub> =0	5			V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =60V, I <sub>E</sub> =0			100	nA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =4V, I <sub>C</sub> =0			100	nA
h <sub>FE</sub> (1)	DC current gain(1)	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	100			
h <sub>FE</sub> (2)	DC current gain(2)	V <sub>CE</sub> =5V, I <sub>C</sub> =500mA	100		300	
h <sub>FE</sub> (3)	DC current gain(3)	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	80			
h <sub>FE</sub> (4)	DC current gain(4)	V <sub>CE</sub> =5V, I <sub>C</sub> =2A	30			
V <sub>CE(sat)1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA			0.25	V
V <sub>CE(sat)2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =1A, I <sub>B</sub> =100mA			0.5	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage	I <sub>C</sub> =1A, I <sub>B</sub> =100mA			1.1	V
V <sub>BE</sub>	Base-emitter voltage	V <sub>CE</sub> =5V, I <sub>C</sub> =1A			1	V
f <sub>T</sub>	Transition frequency	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA, f=100MHz	150			MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =10V, f=1MHz			10	pF

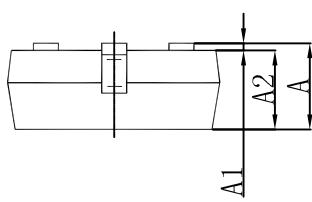
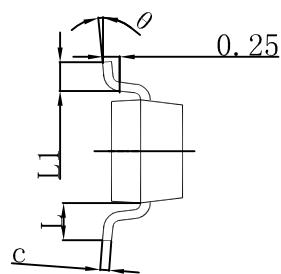
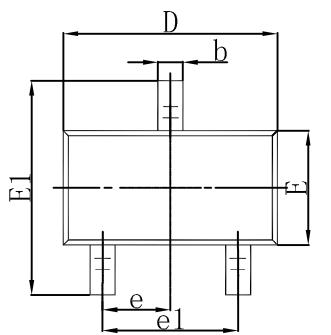


## Typical Characteristics





### SOT-23 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°



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