SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

BCW67
BCW68

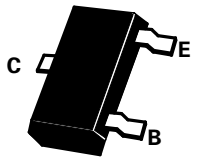
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PARTMARKING DETAILS –

BCW67A – DA	BCW67AR – 4W
BCW67B – DB	BCW67BR – 5W
BCW67C – DC	BCW67CR – 6W
BCW68F – DF	BCW68FR – 7T
BCW68G – DG	BCW68GR – 5T
BCW68H – DH	BCW68HR – 7N

COMPLEMENTARY TYPES –

BCW67 – BCW65
BCW68 – BCW66



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	BCW67	BCW68	UNIT
Collector-Emitter Voltage	V_{CES}	-45	-60	V
Collector-Emitter Voltage	V_{CEO}	-32	-45	V
Emitter-Base Voltage	V_{EBO}	-5		V
Peak Pulse Current(10ms)	I_{CM}	-1000		mA
Continuous Collector Current	I_C	-800		mA
Base Current	I_B	-100		mA
Power Dissipation at T_{amb}=25°C	P_{tot}	330		mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150		°C

BCW67
BCW68

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER		SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Emitter Breakdown Voltage	BCW67 BCW68	$V_{(BR)CEO}$	-32 -45			V	I_{CEO}=-10mA I_{CEO}=-10mA
	BCW67 BCW68	$V_{(BR)CES}$	-45 -60				I_C=-10μA I_C=-10μA
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	-5			V	I_{EBO}=-10μA
Collector-Emitter Cut-off Current	BCW67	I_{CES}			-20 -10	nA μA	V_{CES}=-32V V_{CES}=-32V ,T_{amb}=150°C
	BCW68				-20 -10	nA μA	V_{CES}=-45V V_{CES}=-45V, T_{amb}=150°C
Emitter-Base Cut-Off Current		I_{EBO}			-20	nA	V_{EBO}=-4V
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$		-0.7	-0.3	V V	I_C=-100mA, I_B=-10mA I_C=-500mA, I_B=-50mA*
Base-Emitter Saturation Voltage		$V_{BE(sat)}$			-2	V	I_C=-500mA, I_B=-50mA*
Static Forward Current Transfer	BCW67A BCW68F	h_{FE}	75 100 35	170	250		I_C=-10mA, V_{CE}=-1V I_C=-100mA, V_{CE}=-1V* I_C=-500mA, V_{CE}=-2V*
	BCW67B BCW68G	h_{FE}	120 160 60	250	400		I_C=-10mA, V_{CE}=-1V I_C=-100mA, V_{CE}=-1V* I_C=-500mA, V_{CE}=-2V*
	BCW67C BCW68H	h_{FE}	180 250 100	350	630		I_C=-10mA, V_{CE}=-1V I_C=-100mA, V_{CE}=-1V* I_C=-500mA, V_{CE}=-2V*
Transition Frequency		f_T	100			MHz	I_C=-20mA, V_{CE}=-10V f = 100MHz
Collector-Base Capacitance		C_{cbo}		12	18	pF	V_{CBO}=-10V, f =1MHz
Emitter-Base Capacitance		C_{ebo}			80	pF	V_{EBO}=-0.5V, f =1MHz
Noise Figure		N		2	10	dB	I_C= -0.2mA, V_{CE}=- 5V R_G =1KΩ, f=1KH Δf=200Hz
Switching times: Turn-On Time Turn-Off Time		 t_{on} t_{off}			 100 400	 ns ns	 I_C=-150mA I_{B1}=- I_{B2}=-15mA R_L=150Ω

Spice parameter data is available upon request for this device
*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%