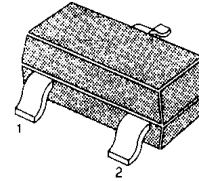


BCW60A/B/C/D**NPN EPITAXIAL SILICON TRANSISTOR****GENERAL PURPOSE TRANSISTOR**

SOT-23

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	32	V
Collector-Emitter Voltage	V _{CEO}	32	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	100	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{STG}	150	°C



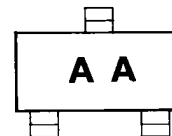
1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =2mA, I _B =0	32		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =1μA, I _C =0	5		V
Collector Cut-off Current	I _{CES}	V _{CB} =32V, V _{BE} =0		20	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} =4V, I _C =0		20	nA
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =10μA	20		
: BCW60B			40		
: BCW60C			100		
: BCW60D			120	220	
: BCW60A		V _{CE} =5V, I _C =2mA	180	310	
: BCW60B			250	460	
: BCW60C			380	630	
: BCW60D			60		
: BCW60A		V _{CE} =1V, I _C =50mA	70		
: BCW60B			90		
: BCW60C			100		
: BCW60D					
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =50mA, I _B =1.25mA		0.55	V
		I _C =10mA, I _B =0.25mA		0.35	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =50mA, I _B =1.25mA	0.7	1.05	V
		I _C =10mA, I _B =0.25mA	0.6	0.85	V
Base-Emitter On Voltage	V _{BE(sat)}	V _{CE} =5V, I _C =2mA	0.55	0.75	V
Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0		4.5	pF
		f=1MHz			
Current Gain-Bandwidth Product	f _T	I _C =10mA, V _{CE} =5V	125		MHz
Noise Figure	NF	I _C =0.2mA, V _{CE} =5V		6	dB
		R _G =2KΩ, f=1KHz			
Turn On Time	t _{ON}	I _C =10mA, I _B 1=1mA		150	ns
Turn Off Time	t _{OFF}	V _{BB} =3.6V, I _B 2=1mA		800	ns
		R1=R2=5KΩ, R _L =990Ω			

MARKING CODE**Marking**

TYPE	BCW60A	BCW60B	BCW60C	BCW60D
MARK.	AA	AB	AC	AD



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