



2SC5353B

NPN SILICON TRANSISTOR

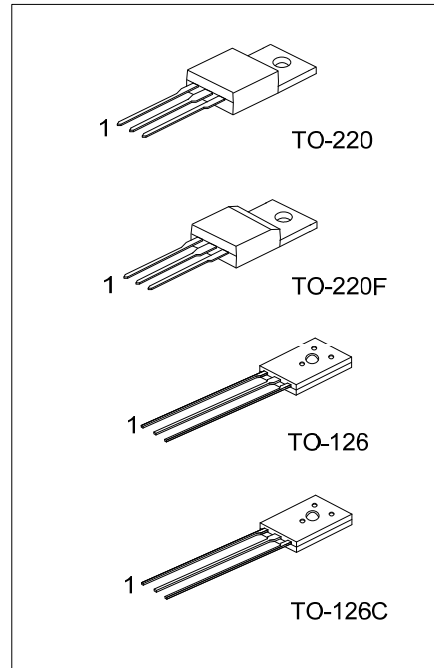
HIGH VOLTAGE NPN TRANSISTOR

DESCRIPTION

Switching Regulator and High Voltage Switching Applications
High-Speed DC-DC Converter Applications

FEATURES

- * Excellent switching times: $t_R = 0.7\mu s_{(MAX)}$, $t_F = 0.5\mu s_{(MAX)}$
- * High collectors breakdown voltage: $V_{CEO} = 750V$



*Pb-free plating product number: 2SC5353BL

ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
2SC5353B-T60-K	2SC5353BL-T60-K	TO-126	B	C	E	Bulk
2SC5353B-T6C-K	2SC5353BL-T6C-K	TO-126C	B	C	E	Bulk
2SC5353B-TA3-T	2SC5353BL-TA3-T	TO-220	B	C	E	Tube
2SC5353B-TF3-T	2SC5353BL-TF3-T	TO-220F	B	C	E	Tube

<p>2SC5353BL-T60-K</p>	<p>(1) Packing Type (2) Package Type (3) Lead Plating</p> <p>(1) K: Bulk, T: Tube (2) T60: TO-126, T6C: TO-126C, TA3: TO-220, TF3: TO-220F (3) L: Lead Free Plating, Blank: Pb/Sn</p>
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■ ABSOLUTE MAXIMUM RATINGS (T_c = 25°C)

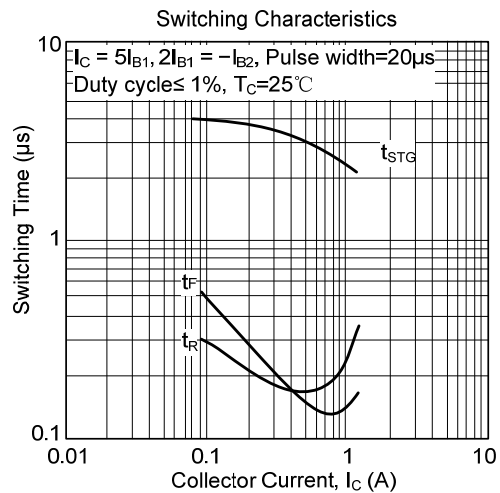
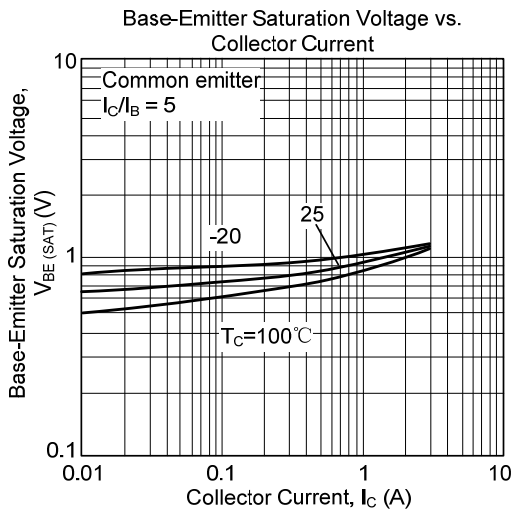
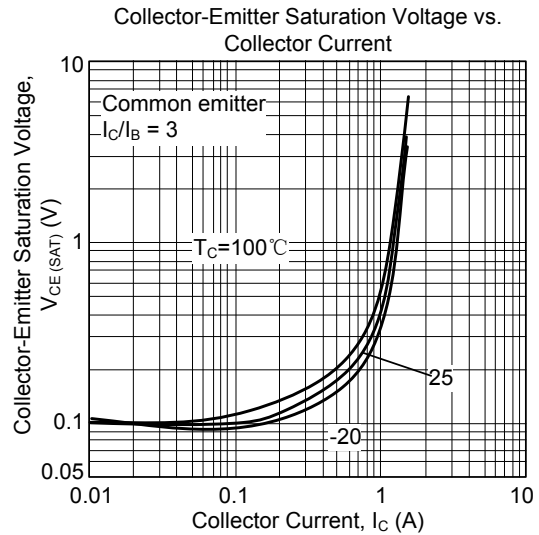
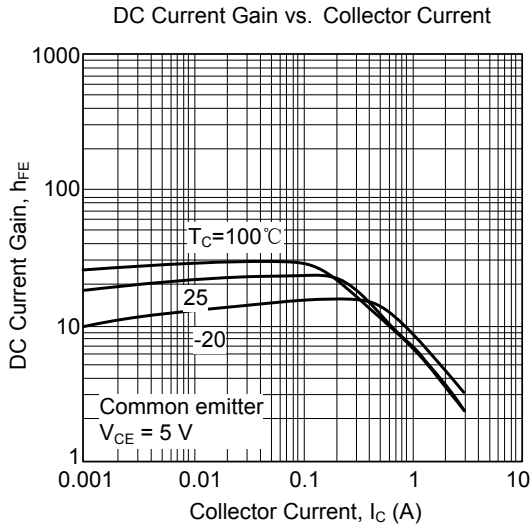
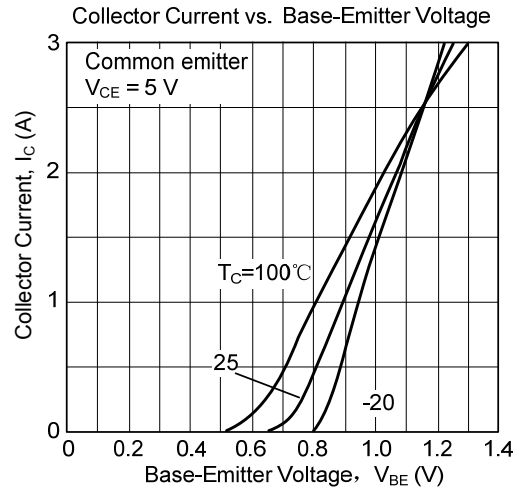
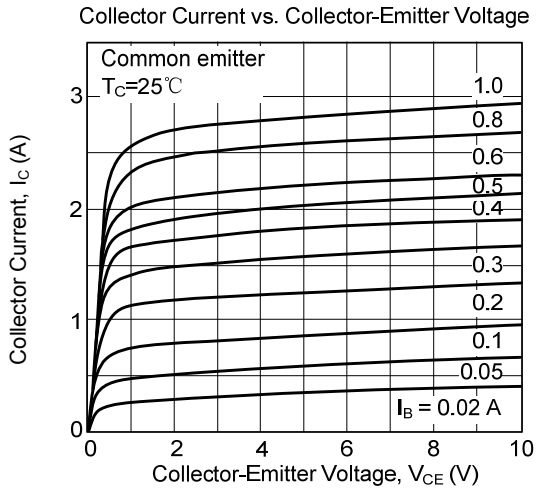
PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V _{CBO}	900	V
Collector-Emitter Voltage		V _{CEO}	750	V
Emitter-Base Voltage		V _{EBO}	7	V
Collector Current	DC	I _C	3	A
	Pulse	I _{CP}	5	
Base Current		I _B	1	A
Collector Power Dissipation	TO-220F/ TO-126/TO-126C	P _D	20	W
	TO-220		25	
Junction Temperature		T _J	+150	°C
Storage Temperature		T _{STG}	-40 ~ +150	°C

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

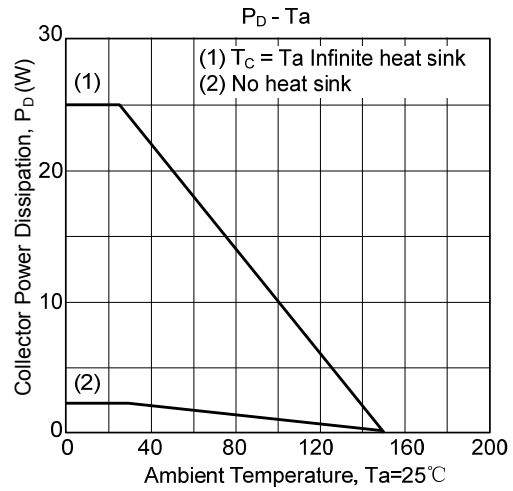
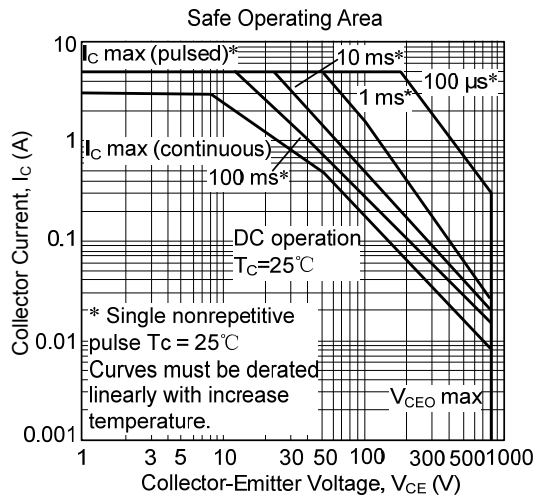
■ ELECTRICAL CHARACTERISTICS (T_c = 25°C)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage		BV _{CBO}	I _C =1 mA, I _E = 0	900			V
Collector-Emitter Breakdown Voltage		BV _{CEO}	I _C =10 mA, I _B = 0	750			V
Collector Cut-off Current		I _{CBO}	V _{CB} =720V, I _E = 0			100	μA
Emitter Cut-off Current		I _{EBO}	V _{EB} =7V, I _C = 0			10	μA
DC Current Gain		h _{FE1}	V _{CE} =5 V, I _C =1 mA	10			
		h _{FE2}	V _{CE} =5 V, I _C =0.15 A	15			
Collector-Emitter Saturation Voltage		V _{CE(SAT)}	I _C =1.2 A, I _B =0.24 A			1.0	V
Base-Emitter Saturation Voltage		V _{BE(SAT)}	I _C =1.2 A, I _B =0.24 A			1.3	V
Switching Time	Rise Time	t _r	<p style="text-align: center;">V_{CC} ≈ 360V</p>			0.7	μS
	Storage Time	t _{STG}				4.0	
	Fall Time	t _F		I _{B1} = 0.24 A, I _{B2} = -0.48 A, duty cycle ≤ 1%			

TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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