



2SC5026

NPN SILICON TRANSISTOR

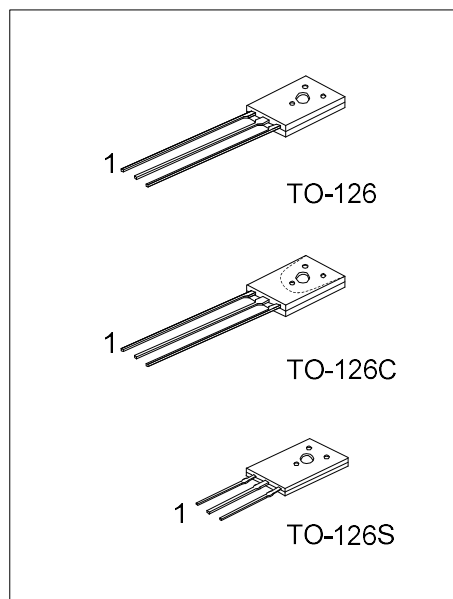
HIGH VOLTAGE NPN TRANSISTOR

DESCRIPTION

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

FEATURES

* High collectors breakdown voltage: $V_{CE0} = 800V$



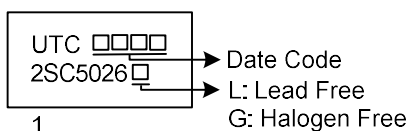
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC5026L-T60-K	2SC5026G-T60-K	TO-126	B	C	E	Bulk
2SC5026L-T6C-K	2SC5026G-T6C-K	TO-126C	B	C	E	Bulk
2SC5026L-T6S-K	2SC5026G-T6S-K	TO-126S	B	C	E	Bulk

Note: Pin Assignment: B: Base C: Collector E: Emitter

2SC5026G-T60-K	(1)Packing Type	(1) K: Bulk
	(2)Package Type	(2) T60: TO-126, T6C: TO-126C, T6S: TO-126S
	(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_C=25°C unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V _{CBO}	1100	V
Collector-Emitter Voltage		V _{CEO}	800	V
Emitter-Base Voltage		V _{EBO}	7	V
Collector Current	DC	I _C	1.5	A
	Pulse	I _{CP}	5	A
Base Current		I _B	0.8	A
Collector Power Dissipation		P _D	20	W
Junction Temperature		T _J	+150	°C
Storage Temperature		T _{STG}	-55 ~ +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.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ _{JA}	89.3	°C/W
Junction to Case	θ _{JC}	6.25	°C/W

Note: Device mounted on FR-4 substrate P_C board, 2oz copper, with 1inch square copper plate.

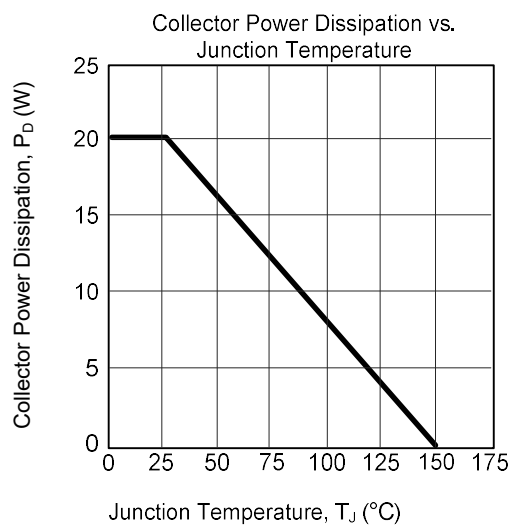
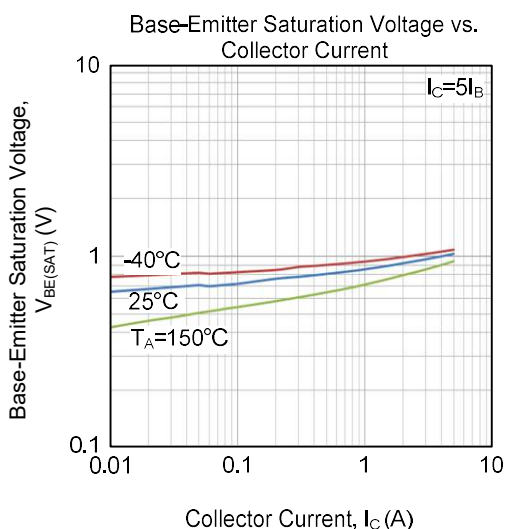
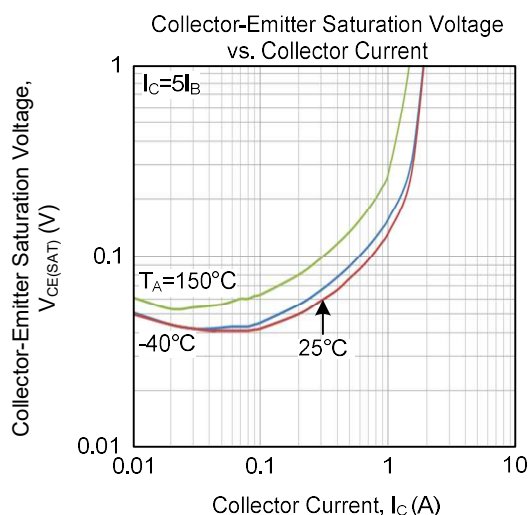
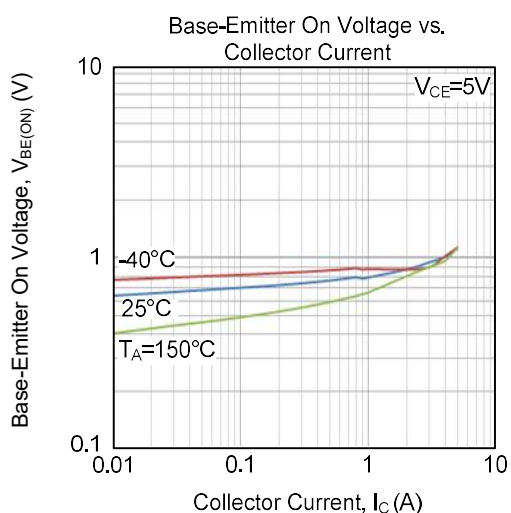
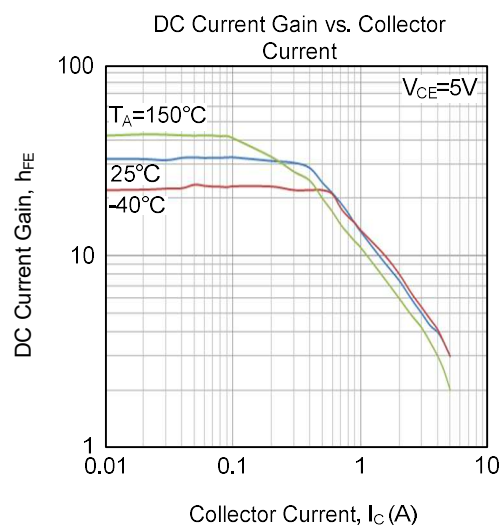
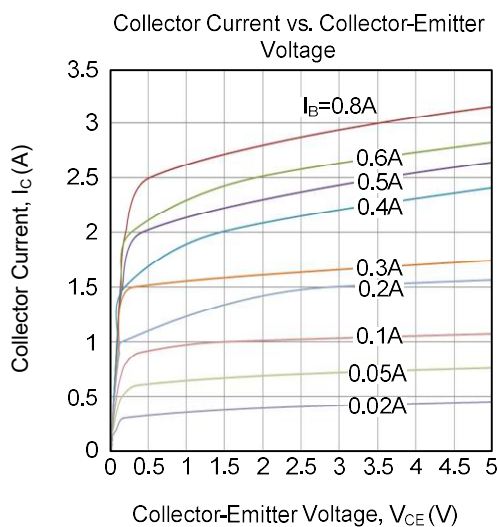
■ ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =1mA, I _E =0	1100			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =5mA, I _B =0	800			V
Emitter-Base Breakdown Voltage	BVEBO	I _E =1mA, I _C =0	7			
Collector Cut-off Current	I _{CBO}	V _{CB} =800V, I _E =0			10	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =5V, I _C =0			10	μA
DC Current Gain	h _{FE1}	V _{CE} =5V, I _C =0.1A	10		40	
	h _{FE2}	V _{CE} =5V, I _C =0.5A	8			
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =0.75A, I _B =0.15A			2	V
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =0.75A, I _B =0.15A			1.5	V
Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		20		pF
Current Gain Bandwidth Product	f _T	V _{CE} =10V, I _C =0.1A		15		MHz

■ CLASSIFICATION OF h_{FE1}

RANK	N	R	O
RANGE	10-20	15-30	20-40

■ TYPICAL CHARACTERISTICS



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