Features

- Moisture Sensitivity Level 1
- Halogen Free."Green"Device(Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Dual NPN Digital Transistor

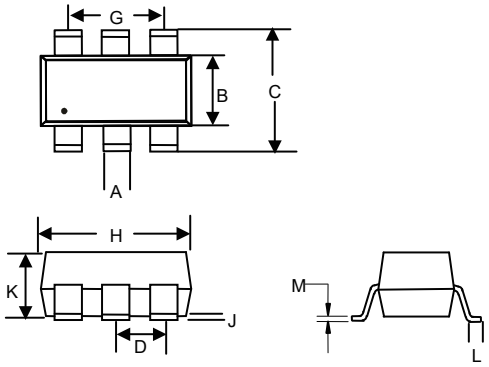
Maximum Ratings @ 25°C Unless Otherwise Specified

- Thermal Resistance: 417°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_o	100	mA
Power Dissipation	P_D	300	mW
Operating Junction Temperature Range	T_J	-55~+150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

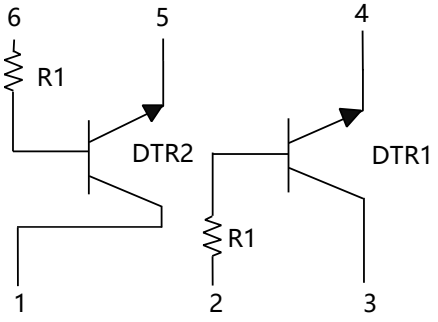
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

SOT23-6L

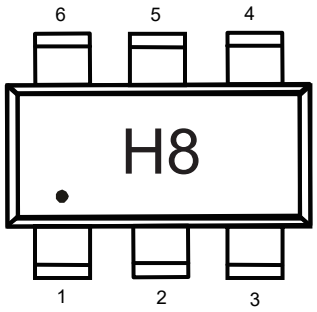


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.012	0.020	0.30	0.50	
B	0.051	0.070	1.30	1.80	
C	0.087	0.126	2.20	3.20	
D	0.037		0.95		TYP.
G	0.074		1.90		TYP.
H	0.106	0.122	2.70	3.10	
J	0.002	0.006	0.05	0.15	
K	0.030	0.051	0.75	1.30	
L	0.012	0.024	0.30	0.60	
M	0.003	0.008	0.08	0.22	

Internal Structure



Device Marking



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	50			V	I_C=50μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	50			V	I_C=1mA, I_B=0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	I_E=50μA, I_C=0
Collector-Base Cutoff Current	I_{CBO}			0.5	uA	V_{CB}=50V, I_E=0
Emitter-Base Cutoff Current	I_{EBO}			0.5	uA	V_{EB}=4V, I_C=0
DC Current Gain	h_{FE}	100		600		V_{CE}=5V, I_C=1mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.3	V	I_C=10mA, I_B=1mA
Input Resistance	R_1	7	10	13	KΩ	
Transition Frequency	f_T	200			MHz	V_{CE}=10V, I_C= 5mA

Curve Characteristics

Fig. 1 - Static Characteristics

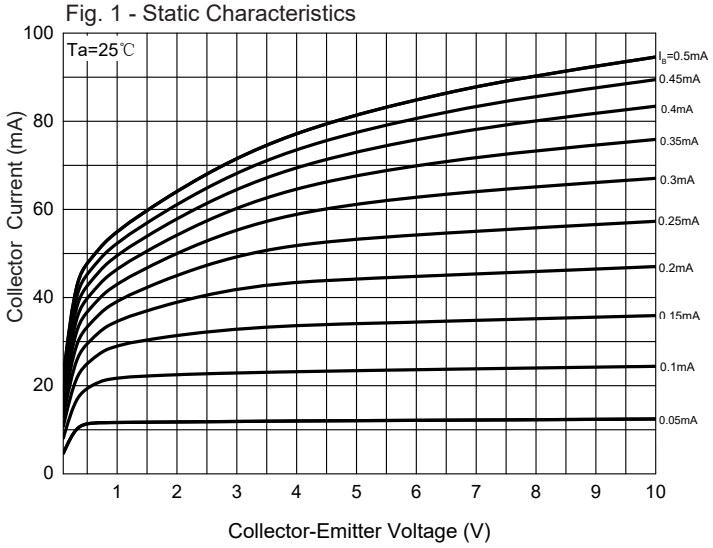


Fig. 2 - DC Current Gain Characteristics

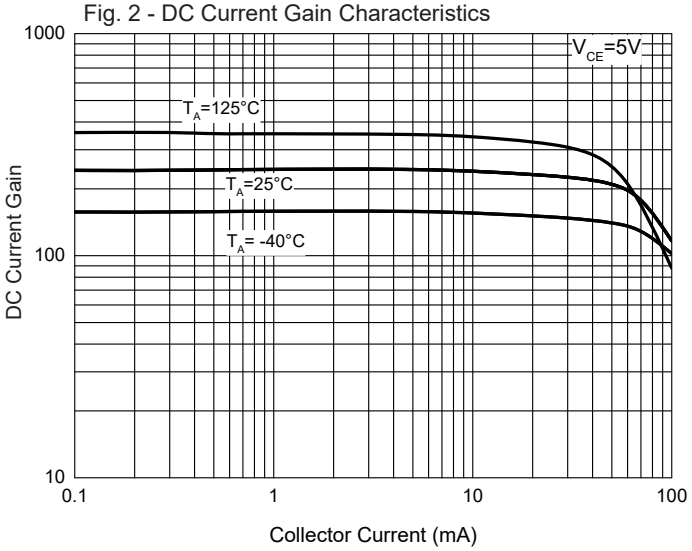


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

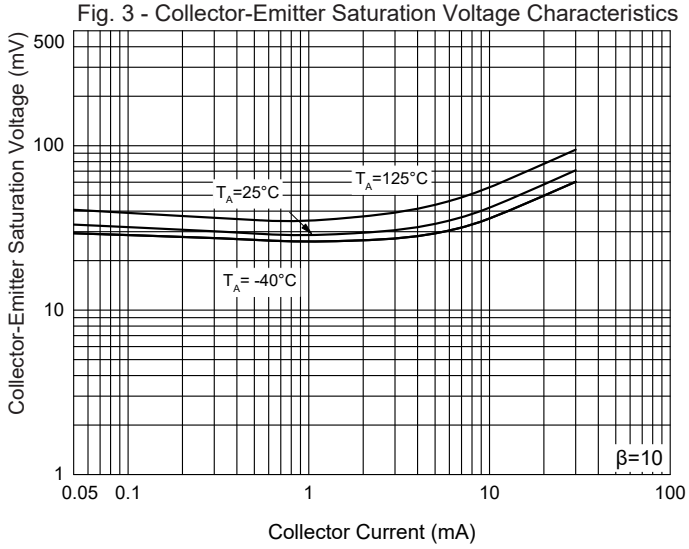


Fig. 4 - Base-Emitter Voltage Characteristics

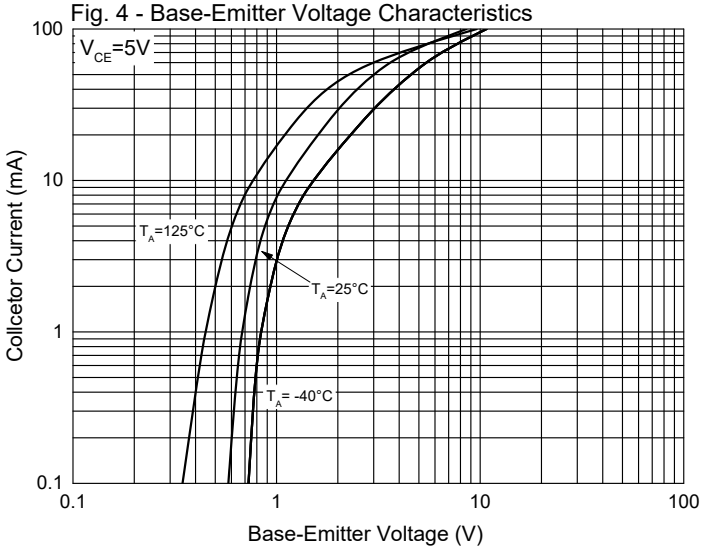
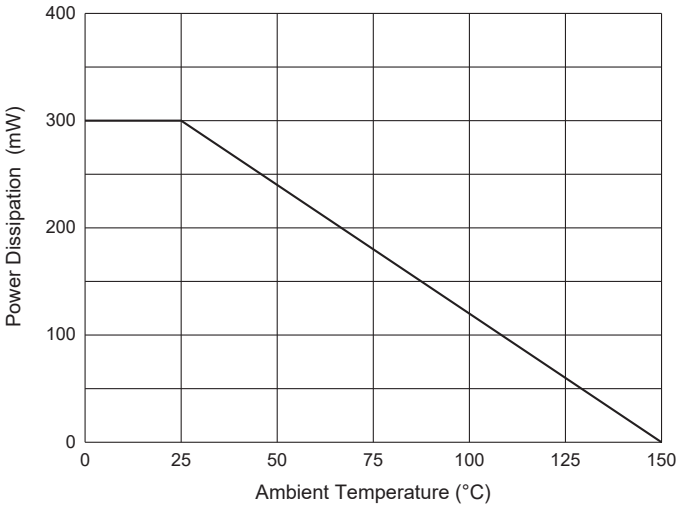


Fig. 6 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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