

Features

- High Current Capacity in compact package.
- Epitaxial planar type.
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Continuous Collector Current	I_c	-1500	mA
Power Dissipation	P_D	300	mW

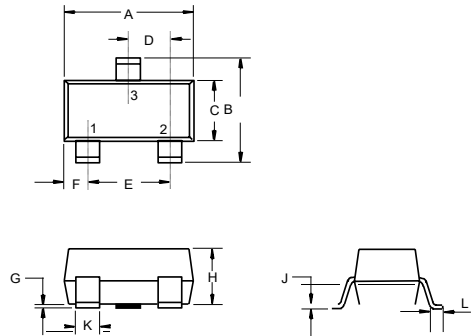
Thermal characteristics

Parameter	Symbol	Rating	Unit
Operating Junction Temperature Range	T_J	-55~+150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C
Thermal Resistance from Junction to Ambient	$R_{th(j-a)}$	417	°C/W

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

**PNP
General Purpose
Transistors**

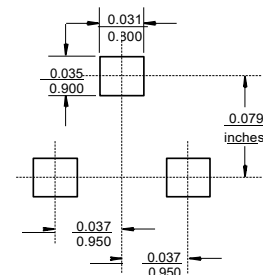
SOT-23



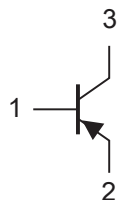
DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout

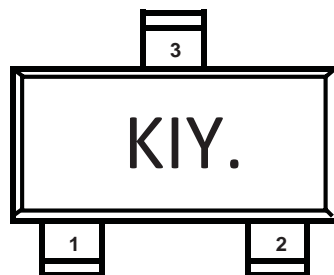


Internal Structure



- 1. Base
- 2. Emitter
- 3. Collector

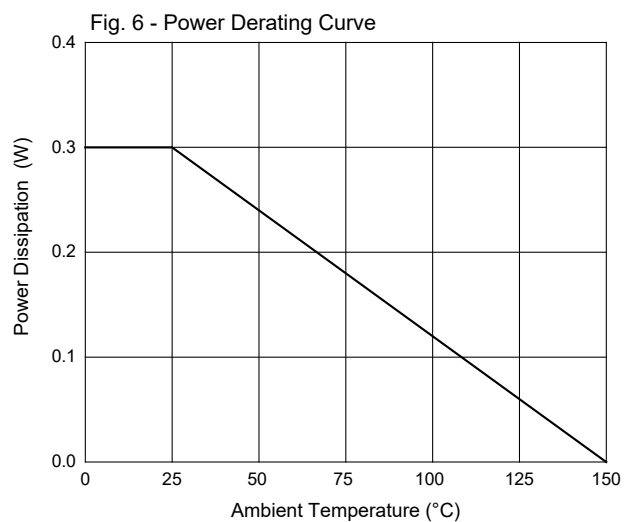
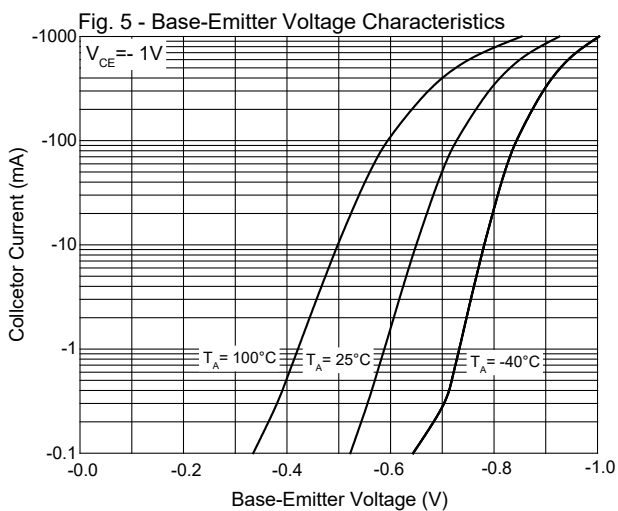
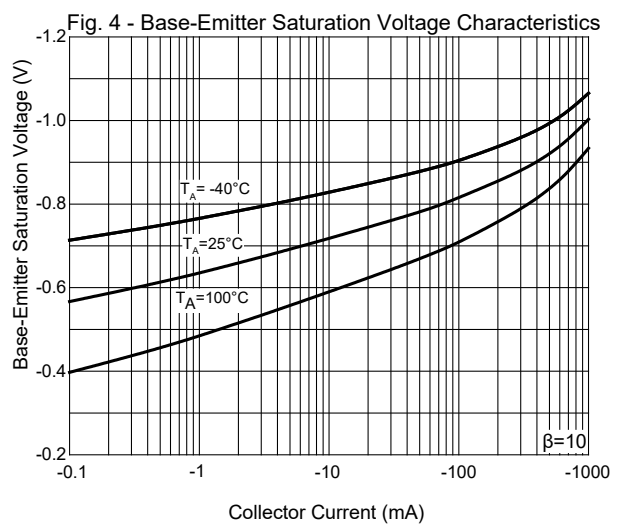
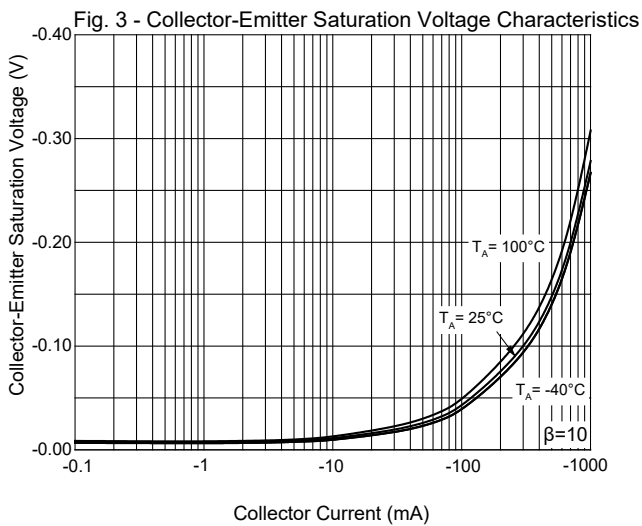
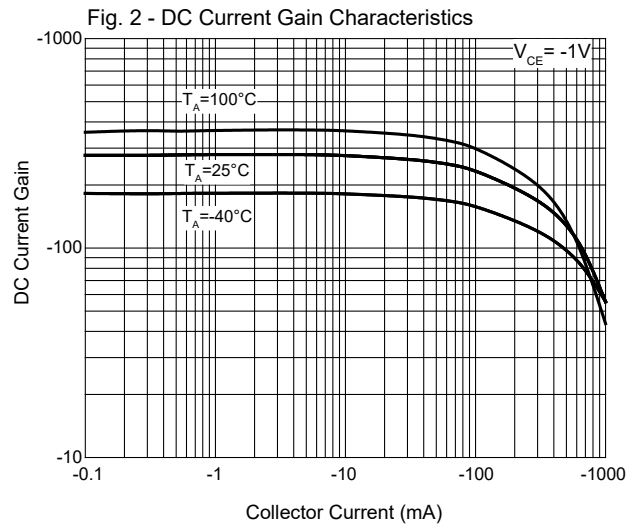
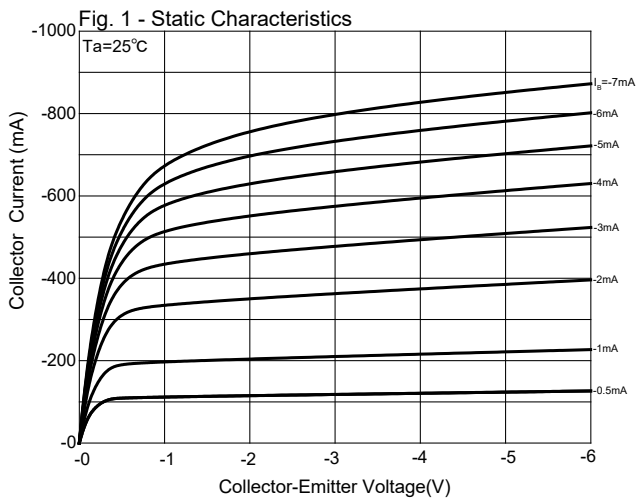
Marking Code



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-50			V	$I_C = -100\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-50			V	$I_C = -2mA, I_B = 0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6			V	$I_E = -100\mu A, I_C = 0$
Collector-Base Cutoff Current	I_{CBO}			-100	nA	$V_{CB} = -35V, I_E = 0$
Emitter-Base Cutoff Current	I_{EBO}			-100	nA	$V_{EB} = -6V, I_C = 0$
Base-Emitter Voltage	V_{BE}			-1	V	$V_{CE} = -1V, I_C = -10mA$
DC Current Gain	$h_{FE(1)}$	160		320		$V_{CE} = -1V, I_C = -100mA$
	$h_{FE(2)}$	40				$V_{CE} = -1V, I_C = -800mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	$I_C = -800mA, I_B = -80mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1.2	V	$I_C = -800mA, I_B = -80mA$

Curve Characteristics



Ordering Information

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

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