

#### Features

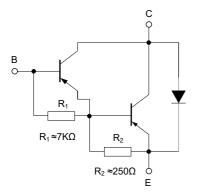
- High DC Current Gain
- Built-in a Damper Diode at E-C
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings @ 25°C Unless Otherwise Specified

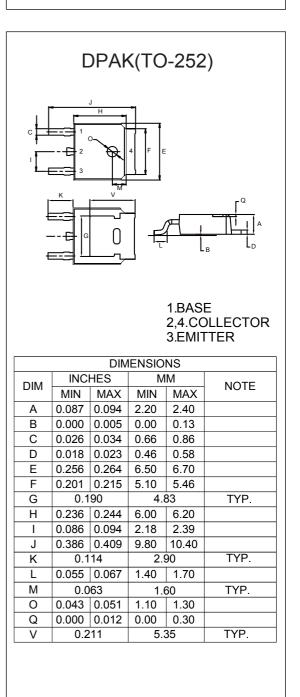
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 83°C/W Junction to Ambient
- Thermal Resistance: 6.25°C/W Junction to Case

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-100	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-100	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Continuous Collector Current	I <sub>C</sub>	-8	А
Power Dissipation	P <sub>D</sub>	1.5	W

## Internal Schematic Diagram



# Silicon PNP epitaxial planer Transistors





# Electrical Characteristics @ T<sub>A</sub>=25°C Unless Otherwise Specified

Parameter	Symbol	Min	Тур	Max	Units	Conditions
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	-100			V	I <sub>C</sub> =-1mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	-100			V	I <sub>C</sub> =-30mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	-5			V	I <sub>E</sub> =-10mA, I <sub>C</sub> =0
Collector Cutoff Current	I <sub>CBO</sub>			-10	μA	V <sub>CB</sub> =-100V, I <sub>E</sub> =0
Collector-Emitter Cutoff Current	I <sub>CEO</sub>			-10	μA	V <sub>CE</sub> =-50V, I <sub>B</sub> =0
Emitter Cutoff Current	I <sub>EBO</sub>			-2	mA	V <sub>EB</sub> =-5V, I <sub>C</sub> =0
DC Current Gain	h <sub>FE(1)</sub>	1000		12000		V <sub>CE</sub> =-4V, I <sub>C</sub> =-4A
	h <sub>FE(2)</sub>	100				V <sub>CE</sub> =-4V, I <sub>C</sub> =-8A
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub> -			-2.0	V	I <sub>C</sub> =-4A, I <sub>B</sub> =-16mA
				-4.0	V	I <sub>C</sub> =-8A, I <sub>B</sub> =-80mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			-4.5	V	I <sub>C</sub> =-8A, I <sub>B</sub> =-80mA
Base-Emitter Voltage	V <sub>BE</sub>			-2.8	V	$V_{CE}$ =-4V, I <sub>C</sub> =-4A
Output Capacitance	C <sub>ob</sub>			300	pF	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=0.1MHz



# **Curve Characteristics**

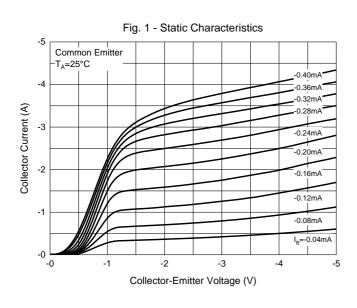
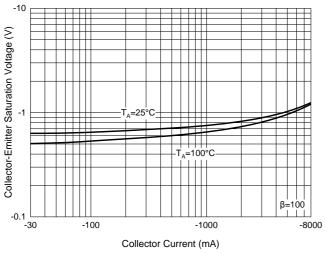
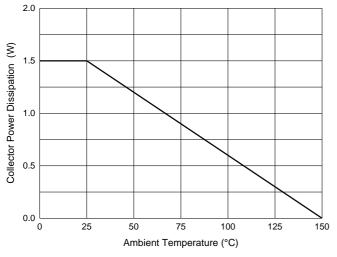


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics







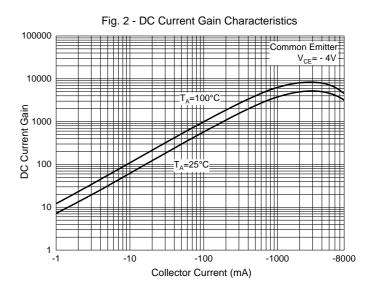
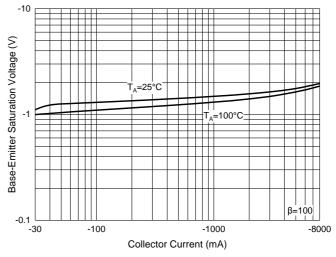


Fig. 4 - Base-Emitter Saturation Voltage Characteristics





## **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel		

Note : Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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