

### Features

- Mounting Possible With SOT-563 Automatic Mounting Machines
- Transistor Elements Independent, Eliminating Interference
- Design For Saving Space and Cost
- Halogen Free. "Green" Device (Note 1)
- 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

• Thermal Resistance: 833°C/W Junction to Ambient

Parameter	Symbol	Value	Unit
Collector-emitter Voltage	$V_{CEO}$	50	V
Output Current	Ι <sub>C</sub>	100	mA
Power Dissipation	P <sub>D</sub>	150	mW
Junction Temperature	TJ	150	°C
Storage Temperature	T <sub>stg</sub>	-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.

# Dual NPN Digital Transistor



#### Internal Structure



Device Marking:





# Electrical Characteristics @ 25°C Unless Otherwise Specified <For DTR1 and DTR2 in Common>

Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Collector-base Voltage	V <sub>CBO</sub>	50			V	Ι <sub>C</sub> =50μΑ
Collector-emitter Voltage	V <sub>CEO</sub>	50			V	I <sub>C</sub> =1mA
Emitter-base Voltage	V <sub>EBO</sub>	5			V	Ι <sub>Ε</sub> =50μΑ
Collector cut-off current	I <sub>CBO</sub>			0.5	μA	V <sub>CB</sub> =50V
Emitter cut-off current	I <sub>EBO</sub>			0.5	μA	V <sub>EB</sub> =4V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>			0.3	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
DC Current Gain	Gı	100		600		$V_{CE}$ =5V, I <sub>C</sub> =1mA
Input Resistance	R <sub>1</sub>	7	10	13	KΩ	
Transition Frequency	f <sub>T</sub>		250		MHz	V <sub>CE</sub> =10V, I <sub>E</sub> =5mA, f=100MHz



#### **Curve Characteristics**

# <For DTR1 and DTR2 in Common>







Collector Current (mA)













# **Ordering Information**

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

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