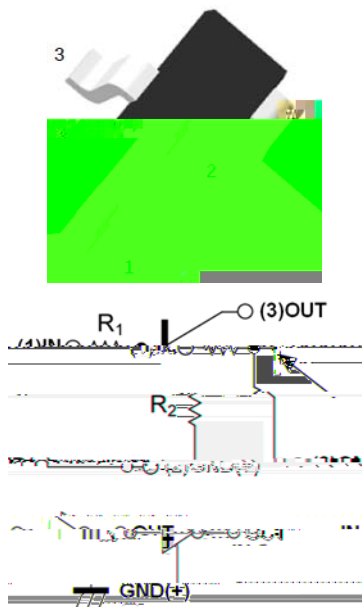




DTA114YE

PNP Digital Transistors (Built-in Resistors)



Features

- Moisture sensitivity level 1
- Halogen free and RoHS compliant
- Surface mount package ideally suited for automatic Insertion

Application

- Signal amplification
- Switching circuit

Mechanical data

Package SOT-523

Ω Maximum Ratings ($T_a=25$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Device marking code				54
Supply voltage	V_{CC}	V		-50
Input voltage	V_{IN}	V		-40 to +6
Output current	I_O	mA		-100
Power dissipation	P_D	mW		150
Operation junction temperature	T_J			-55 to +150
Storage temperature	T_{STG}			-55 to +150



DTA114YE

Ω Electrical Characteristics (T_a=25 Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Input voltage	V _{I(off)}	V	V _{CC} =-5V, I _O =-100uA	-0.3		
Collector-emitter breakdown voltage	V _{I(on)}	V	V _O =-0.3V, I _O =-1mA			-1.4
Output voltage	V _{O(on)}	V	I _O /I _i =-5mA/-0.25 mA			-0.3
Input current	I _I	mA	V _I =-5V			-0.88
Output current	I _{O(off)}	uA	V _{CC} =-50V, V _i =0			-0.5
DC current gain	G _I		V _O =-5V, I _O =-5mA	68		
Input resistance	R ₁	k _Ω		7	10	13
Resistance ratio	R ₂ /R ₁			3.7	4.7	5.7
Transition frequency	f _T	MHz	V _O =-10V, I _O =-5mA		250	

Ω Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{JA} ⁽¹⁾	/W	833
Thermal resistance, junction-to-case	R _{JC} ⁽¹⁾	/W	666

Note:

1 Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 25.4mm*25.4mm copper pad areas

Ω Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DTA114YE	F2	Approximate 0.0027	3000	30000	120000	7" reel

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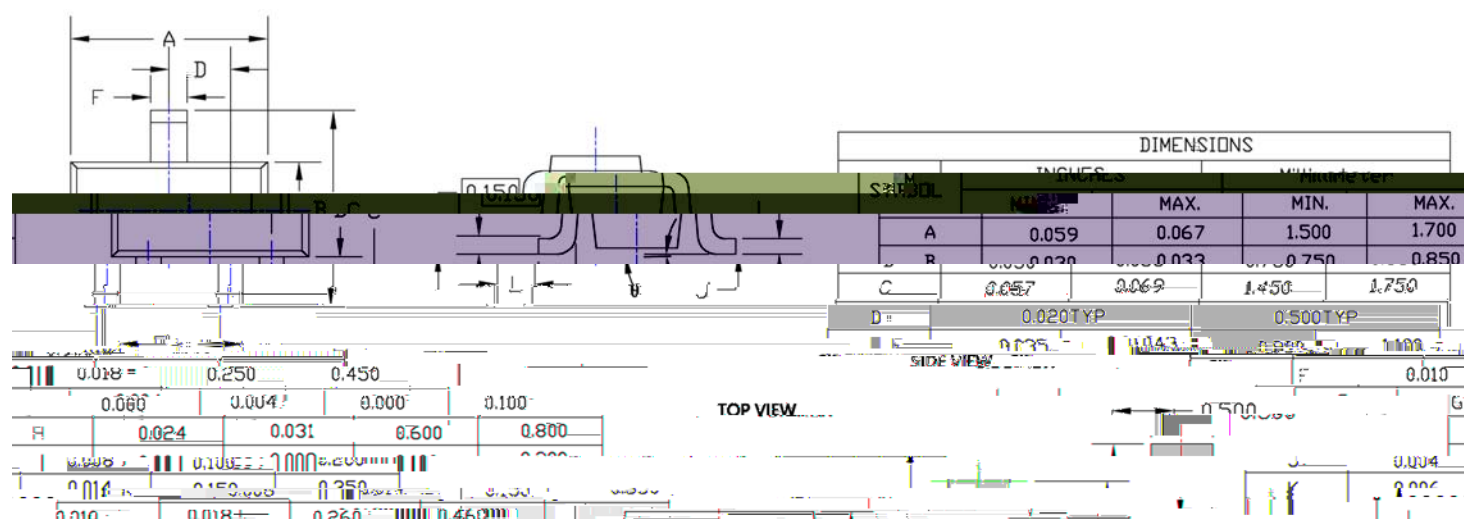
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DTA114YE

Ω Outline Dimensions





DTA114YE

Disclaimer

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