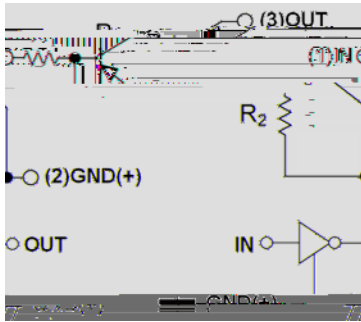


DTA124XE

PN501 surface mount package ideally suited for automatic Insertion



Application

Signal amplification
Switching circuit

Mechanical data

Package

Device marking code				35
Supply voltage	V_{CC}	V		-50
Input voltage	V_{IN}	V		-40 to +10
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

Value



DTA124XE

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	-0.4		
Collector-emitter breakdown voltage	V _{I(on)}	V	V _o =-0.3V, I _o =-2mA			-2.5
Output voltage	V _{O(on)}	V	I _o / I _i = -10mA / -0.5 mA			-0.3
Input current	I _I	mA	V _I =-5V			-0.36
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		15.4	22	28.6
Resistance ratio	R ₂ /R ₁			1.7	2.1	2.6
Transition frequency	f _T	MHz	V _o =-10V, I _o =-5mA, f=100MHz		250	

Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{J-A} ⁽¹⁾	/W	833
Thermal resistance, junction-to-case	R _{J-C} ⁽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

Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DTA124XE	F2	Approximate 0.0027	3000	30000	120000	7" reel



DTA124XE

Characteristics

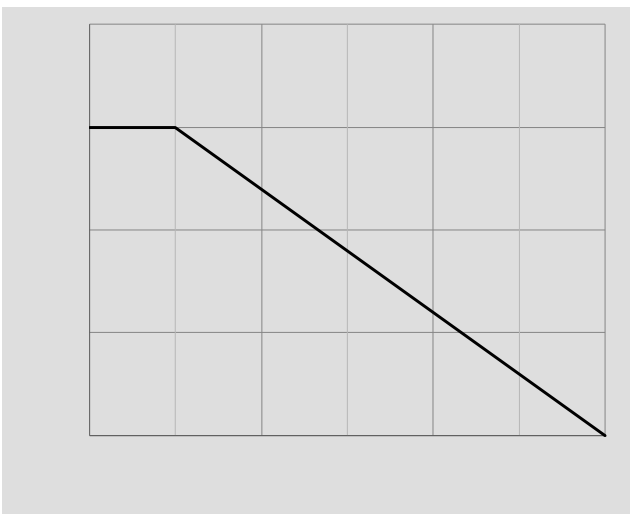
Fig 1 ON Characteristics

Fig 2 OFF Characteristics

Fig 3 $V_{O(ON)} - I_o$

Fig 4 $G_i - I_o$

Fig 5 $P_D - T_a$ Curve



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DTA124XE

Disclaimer