ZTX449STOA Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	ZTX449STOA-DG
Manufacturer	Diodes Incorporated
Manufacturer Product Number	ZTX449STOA
Description	TRANS NPN 30V 1A E-LINE
Detailed Description	Bipolar (BJT) Transistor NPN 30 V 1 A 150MHz 1 W T hrough Hole E-Line (TO-92 compatible)

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
ZTX449STOA	Diodes Incorporated
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	1 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
30 V	1V @ 200mA, 2A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100nA (ICBO)	100 @ 500mA, 2V
Power - Max:	Frequency - Transition:
1 W	150MHz
Operating Temperature:	Mounting Type:
-55°C ~ 200°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
E-Line-3, Formed Leads	E-Line (TO-92 compatible)
Base Product Number:	
ZTX449	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8541.29.0075	

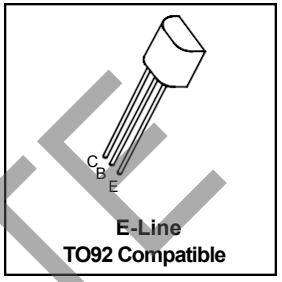
NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

ZTX449

ISSUE3

FEATURES

* 30 Volt V_{CEO}
* 1 Amp continuous current
* P_{tot}= 1 Watt



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	2	A
Continuous Collector Current	I_C	1	A
Power Dissipation at T_{amb} = 25°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +200	°C

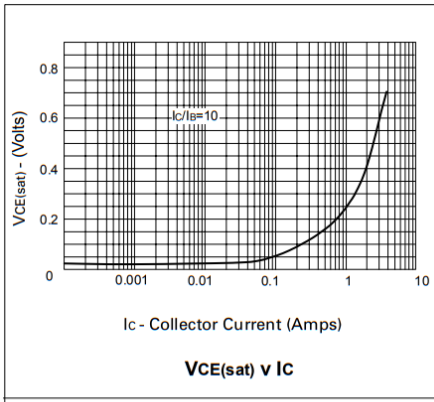
ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	50			V	I_C=100μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30			V	IC=10mA, I_B=0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	I_E=100μA, I_C=0
Collector Cut-Off Current	I_{CBO}			0.1 10	μA μA	V_{CB}=40V V_{CB}=40V, T_{amb}=100°C
Emitter Cut-Off Current	I_{EBO}			0.1	μA	V_{EB}=4V, I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5 1	V V	I_C=1A, I_B=100mA* I_C=2A, I_B=200mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.25	V	I_C=1A, I_B=100mA*
Base-Emitter Turn-on Voltage	$V_{BE(on)}$			1	V	IC=1A,V_{CE}=2V*
Static Forward Current Transfer Ratio	h_{FE}	0 100 80 40		300		I_C=50mA, V_{CE}=2V* I_C=500mA, V_{CE}=2V* I_C=1A, V_{CE}=2V* I_C=2A, V_{CE}=2V*
Transition Frequency	f_T	150			MHz	I_C=50mA, V_{CE}=10V f=100MHz
Output Capacitance	C_{obo}			15	pF	V_{CB}=10V, f=1MHz

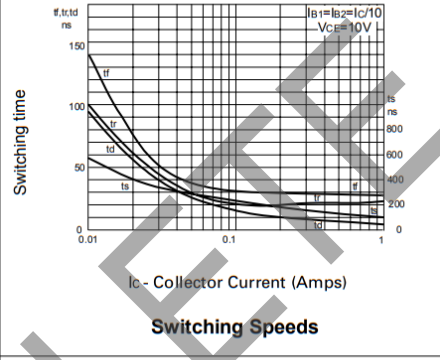
*Measured under pulsed conditions. Pulse w dt =300μs. Duty cycle ≤ 2%

ZTX449

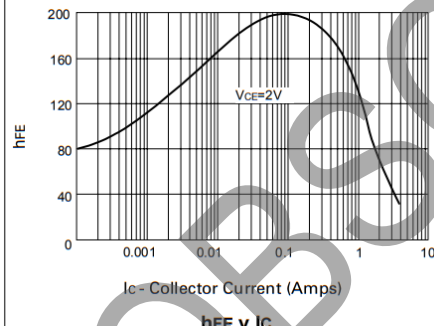
TYPICAL CHARACTERISTICS



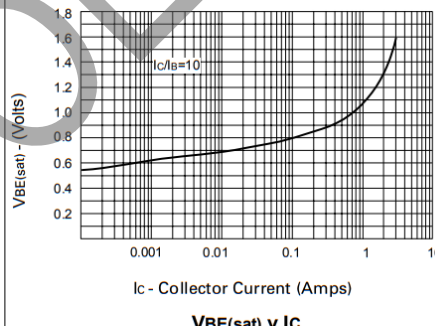
VCE(sat) v IC



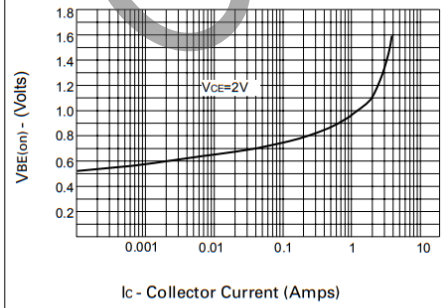
Switching Speeds



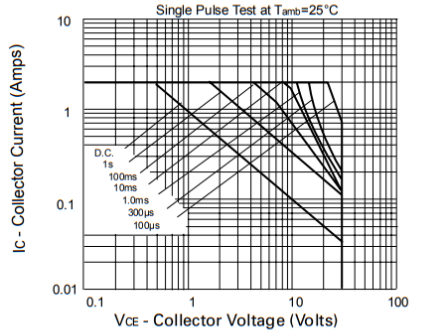
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.