

Absolute Maximum Ratings (Voltages to GND Unless Otherwise Stated)

Parameter	Rating	Unit
Reverse Current	30	mA
Forward Current	10	mA
Operating Temperature	-40 to 85	°C
Storage Temperature	-55 to 125	°C
Power Dissipation (T _{AMB} = 25°C) SOT23	330	mW

Electrical Characteristics (Test conditions: T_{amb} = 25°C, unless otherwise specified.)

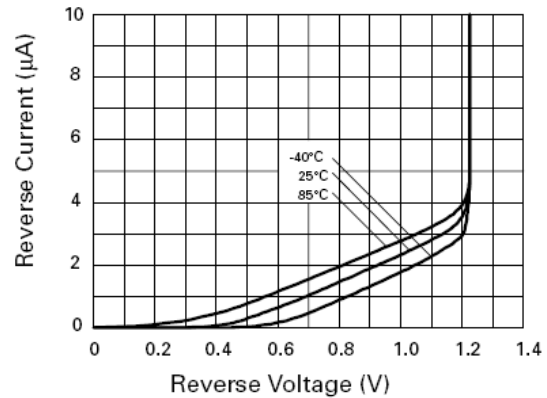
Symbol	Parameter	Condition	Min.	Typ.	Max.	Tol. (%)	Unit
V _R	Reverse breakdown voltage	I _R = 100μA	1.208 1.183	1.22 1.22	1.232 1.257	1 3	V
I _{MIN}	Minimum knee current			4	8		μA
I _R	Recommended operating current range		0.008		20		mA
T _C ^(*)	Average reverse breakdown voltage temperature coefficient	I _R (MIN) to I _R (MAX)		20	75		ppm/°C
$\frac{\Delta V_R}{\Delta I_R}$	Reverse breakdown voltage change with current	I _R =8μA to 1mA I _R =1mA to 20mA			1 10		mV
Z _R	Reverse dynamic impedance	I _R = 1mA f = 100Hz I _{AC} = 0.1I _R		0.2	0.6		Ω
E _N	Wideband noise voltage	I _R =8μA to 100μA f=10Hz to 10kHz		60			μV(rms)

Notes:

$$(*) T_C = \frac{(V_{R(MAX)} - V_{R(MIN)}) \times 1000000}{V_R \times (T_{(MAX)} - T_{(MIN)})}$$

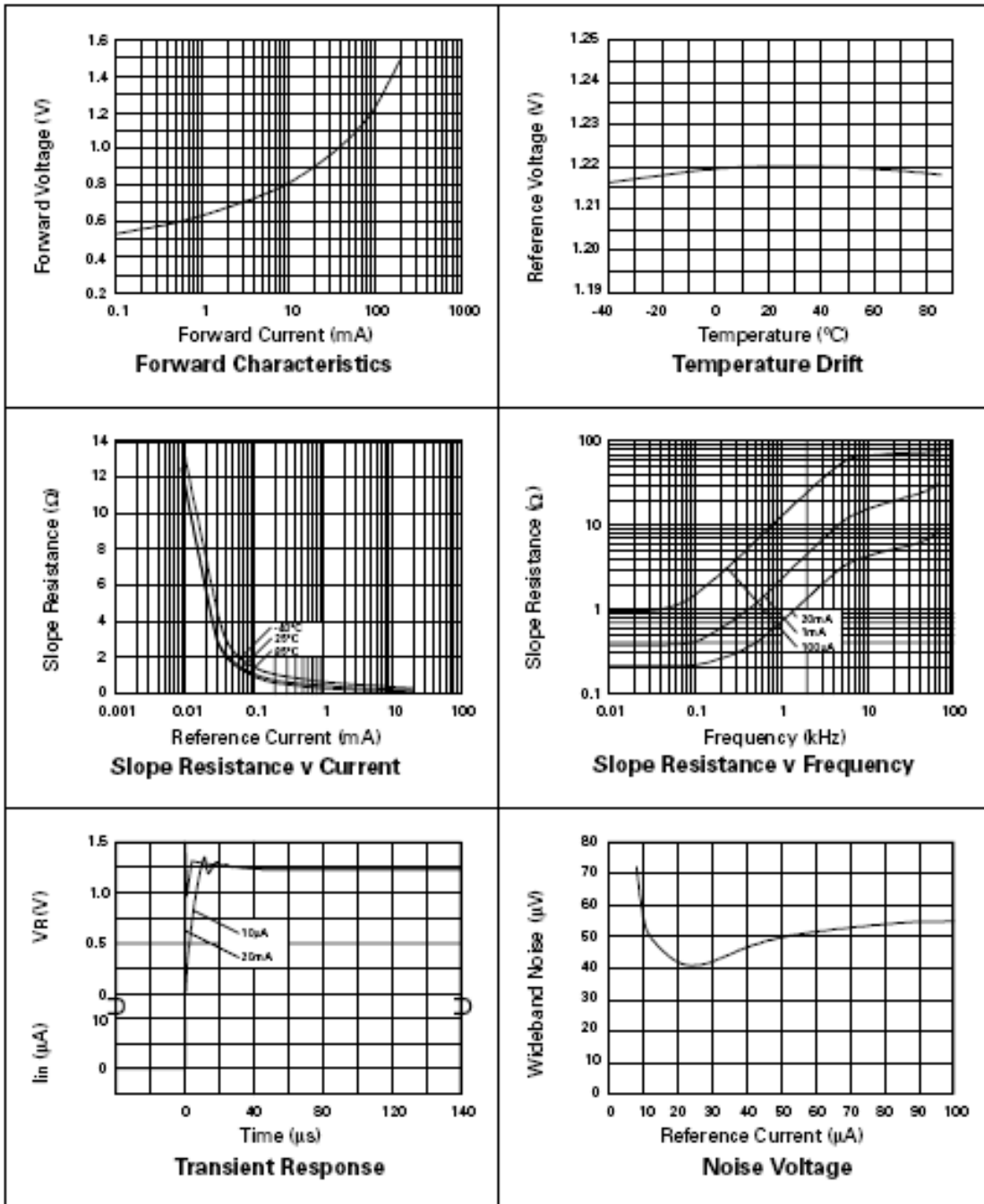
Note: V_{R(MAX)} - V_{R(MIN)} is the maximum deviation in reference voltage measured over the full operating temperature range.

(†) 0.5% SOT23 only



Reverse Characteristics

Typical Characteristics



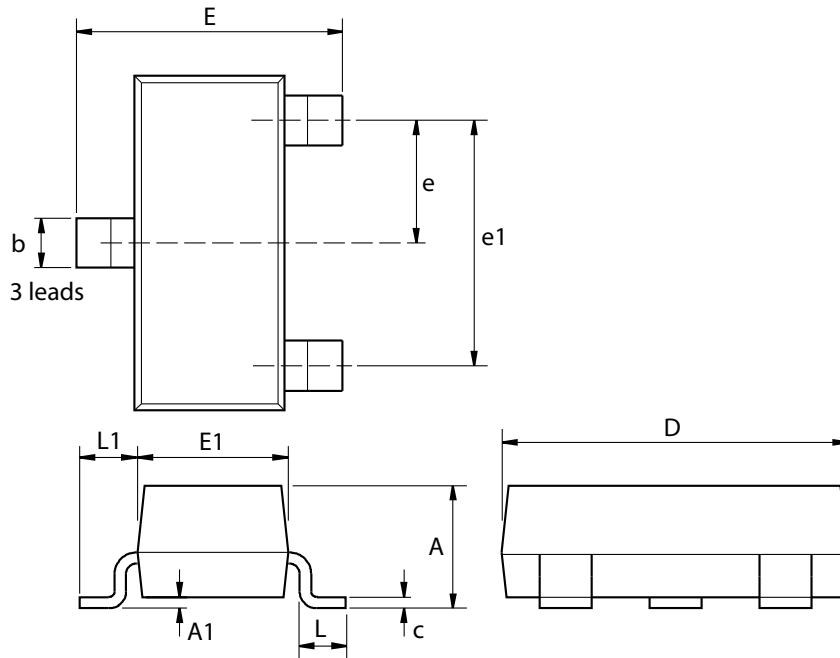
Ordering Information^(*)

Order Reference	Tol (%)	Package	Device Mark	Status (*)	Reel Size (inches)	Quantity per reel	Tape Width (mm)
ZXRE1004CF TA	0.5	SOT23	10D	Obsolete	7	3000	8
ZXRE1004DF TA	1	SOT23	10C	Released	7	3000	8
ZXRE1004EF TA	2	SOT23	10B	NRND	7	3000	8
ZXRE1004FF TA	3	SOT23	10A	Released	7	3000	8

Notes: *All ZXRE1004xR variants (E-Line) are obsolete.
NRND = Not Recommended for New Designs
For tape and reel options add suffix TA to the part number eg ZXRE1004DF TA

Package Outline Dimensions

SOT23



Dim.	Millimeters		Inches		Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	-	1.12	-	0.044	e1	1.90 NOM		0.075 NOM	
A1	0.01	0.10	0.0004	0.004	E	2.10	2.64	0.083	0.104
b	0.30	0.50	0.012	0.020	E1	1.20	1.40	0.047	0.055
c	0.085	0.20	0.003	0.008	L	0.25	0.60	0.0098	0.0236
D	2.80	3.04	0.110	0.120	L1	0.45	0.62	0.018	0.024
e	0.95 NOM		0.037 NOM		-	-	-	-	-

Note: Controlling dimensions are in millimeters. Approximate dimensions are provided in inches

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