

Absolute Maximum Ratings (Voltages to GND Unless Otherwise Stated)

Parameter	Symbol	Rating	Unit
Reverse Current	V_Z	30	mA
Forward Current		10	mA
Operating Temperature	T_{OMP}	-40 to 125	°C
Storage Temperature	T_{STG}	-55 to 125	°C
Power Dissipation ($T_{AMB} = 25^{\circ}C$)	P_D	330	mW

Electrical Characteristics (Test conditions: $T_{amb} = 25^{\circ}C$, unless otherwise specified.)

Symbol	Parameter	Condition	Min.	Typ.	Max.	Tol. (%)	Unit
V_R	Reverse breakdown voltage	$I_R = 100\mu A$	1.219 1.213	1.225 1.225	1.231 1.237	C/0.5 D/1	V
I_{MIN}	Minimum operating current				30		μA
I_R	Recommended operating current		0.03		12		mA
$T_C^{(*)}$	Average reverse breakdown voltage temperature coefficient	$I_{R(min)}$ to $I_{R(max)}$		20	100		ppm/°C
$R_S^{(†)}$	Reverse Breakdown Change with Current Voltage	$I_R = 30\mu A$ to $1\mu A$ $I_R = 1mA$ to $12mA$			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	$I_R = 8\mu A$ to $100\mu A$ $f = 10Hz$ to $10kHz$		60			$\mu V(rms)$

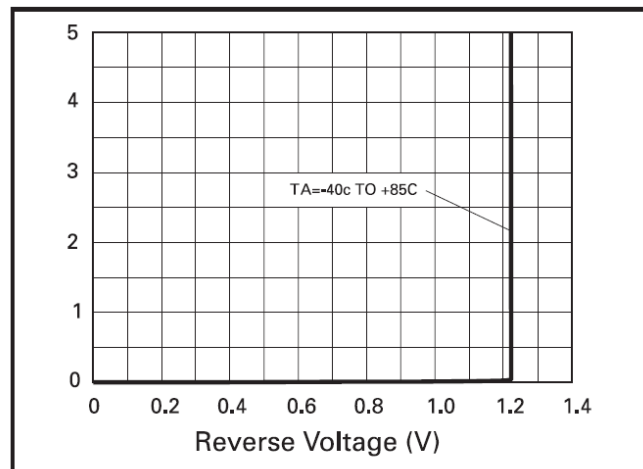
Notes:

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

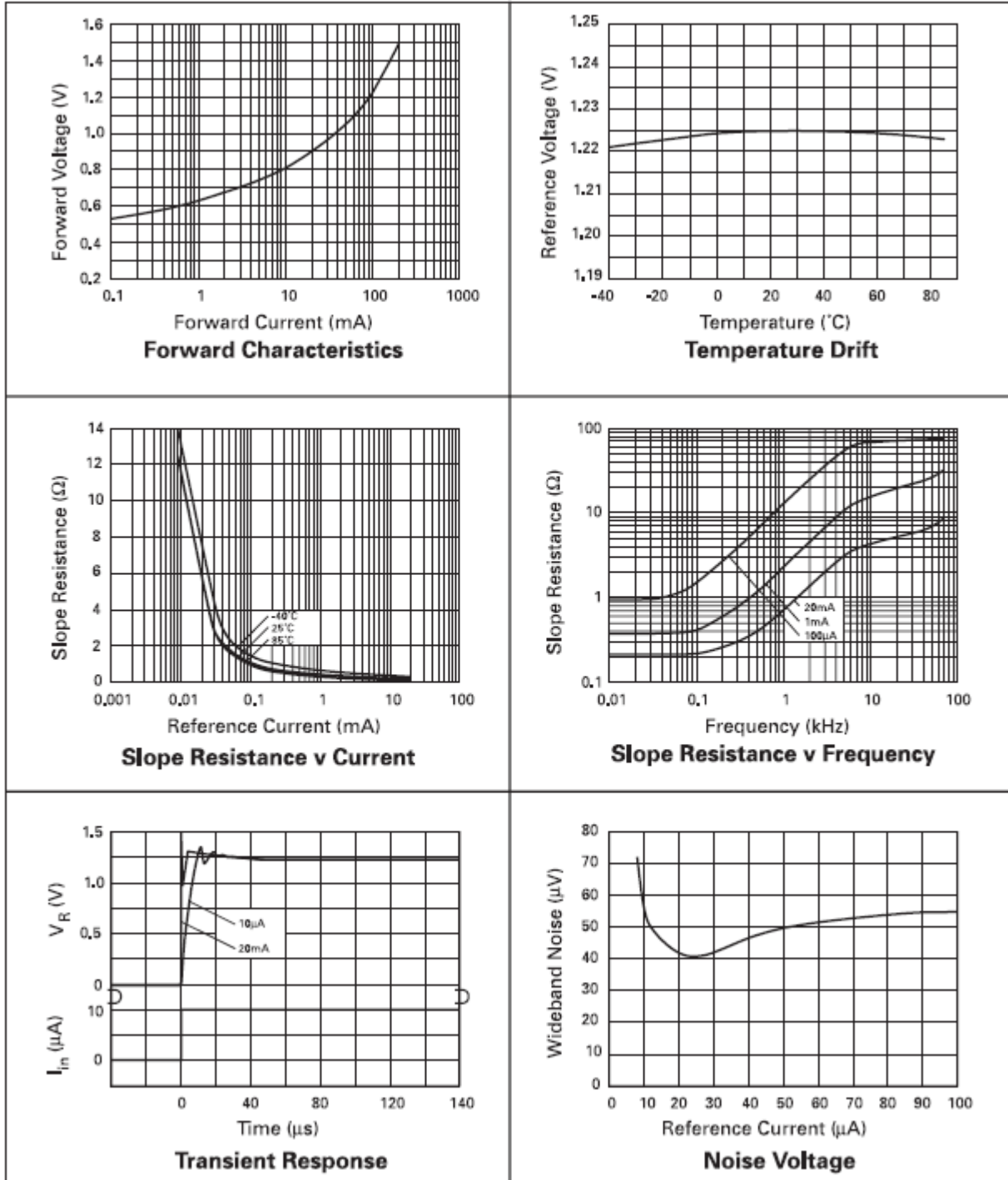
Note: $V_{R(MAX)} - V_{R(MIN)}$ is the maximum deviation in reference voltage measured over the full operating temperature range.

$$(†) R_S = \frac{\Delta V_R}{\Delta I_R}$$

REVERSE CHARACTERISTICS



Typical Characteristics

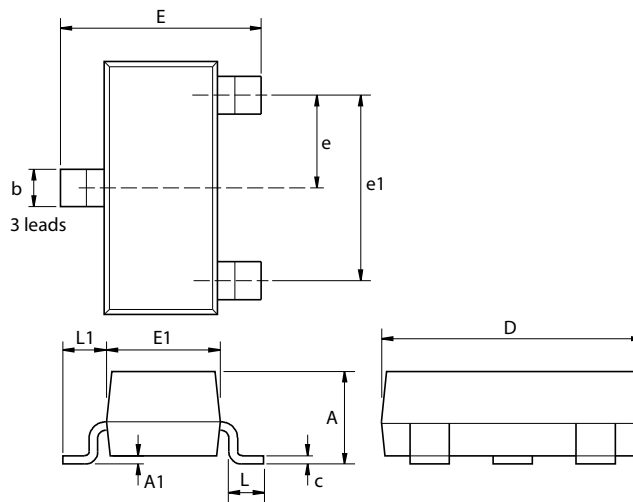


Ordering Information*

Order Reference	Tol (%)	Device Mark	Grade	Status (*)	Reel Size (inches)	Quantity per reel	Tape Width (mm)
ZXRE4041CF	0.5	10J	C	Released	7	3000	8
ZXRE4041DF	1	10H	D	Released	7	3000	8

Notes: *All E-LINE variants of ZXRE4041 are obsolete and no longer available for sale. The closet alternative is the SOT23

Package Outline 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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