5 é / Descriptions

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Zener Diode in a SOT-23 Plastic Package.

¤ ª / Features

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300mW power dissipation, Ideally Suited for Automated Assembly, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Ð ÷ / Applications

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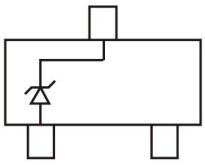
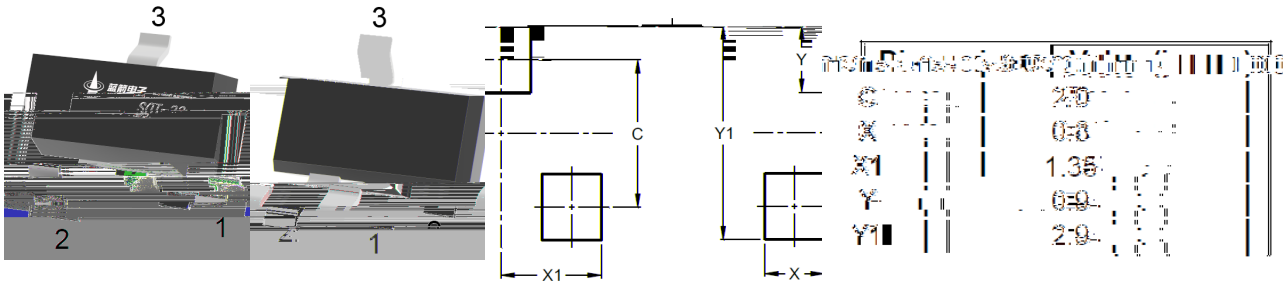
2.4V to 39V wide zener voltage range applications, Meet the stringent requirements of automotive applications.

Ã W] Ô · / Equivalent Circuit



• Û - æ / Pinning



PIN: See Equivalent Circuit.

, M V / Marking

• Å @ ƒož See Electrical Characteristics.

@ *f*	… Z	*f* ›	% y
Parameter	Symbol	Rating	Unit

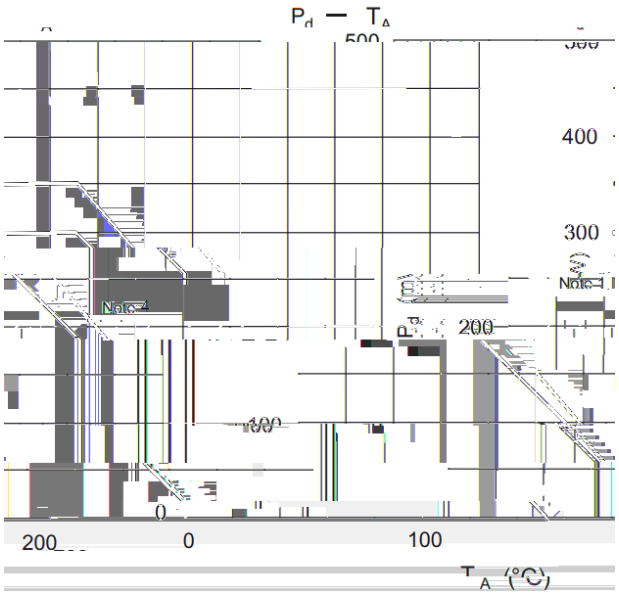
Ô4ì × ? d / Electrical Characteristics(Ta=25 ;)

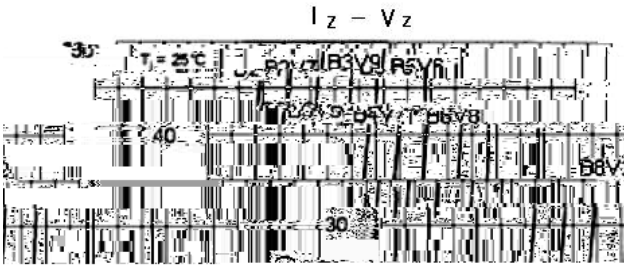
Type Number	Marking Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current	
		V_z @I_{ZT}			I_{ZT}	Z_{ZT} @I_{ZT}	Z_{ZK} @I_{ZK}	I_{ZK}	I_R	@V_R
		Nom (V)	Min (V)	Max (V)	mA			mA	uA	V
BRBZX84B12Q	Q2U	12	11.76	12.24	5	23	141	1	0.09	8
BRBZX84B13Q	Q3U	13	12.74	13.26	5	28	160	1	0.045	8
BRBZX84B15Q	Q4U	15	14.70	15.30	5	28	188	1	0.045	10.5
BRBZX84B16Q	Q5U	16	15.68	16.32	5	37	188	1	0.045	11.2
BRBZX84B18Q	Q6U	18	17.64	18.36	5	42	212	1	0.045	12.6
BRBZX84B20Q	Q7U	20	19.60	20.40	5	51	212	1	0.045	14.0
BRBZX84B22Q	Q8U	22	21.56	22.44	5	51	235	1	0.045	15.4
BRBZX84B24Q	Q9U	24	23.52	24.48	5	65	235	1	0.045	16.8
BRBZX84B27Q	QAU	27	26.46	27.54	5	75	282	0.5	0.045	18.9
BRBZX84B30Q	QBU	30	29.40	30.60	5	75	282	0.5	0.045	21.0
BRBZX84B33Q	CUQ	33	32.34	33.66	5	75	306	0.5	0.045	23.0
BRBZX84B36Q	DUQ	36	35.28	36.72	5	84	329	0.5	0.045	25.2
BRBZX84B39Q	QEU	39	38.22	39.78	5	122	329	0.5	0.045	27.3

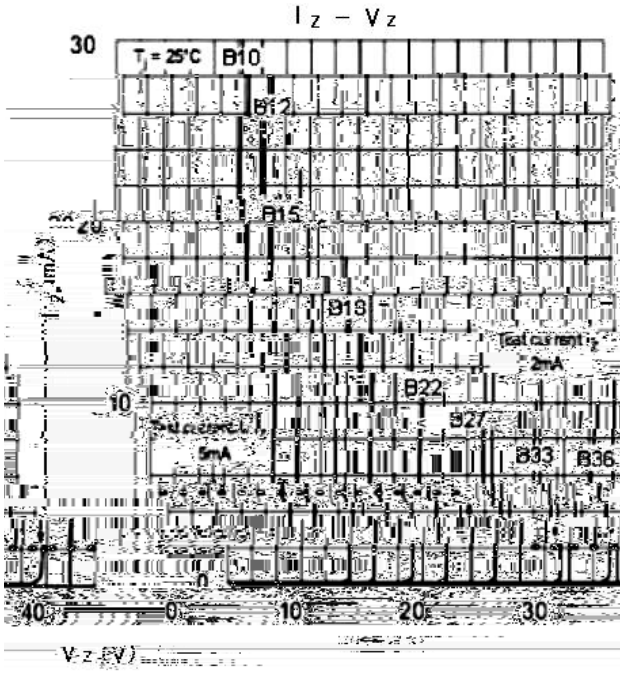
Notes:

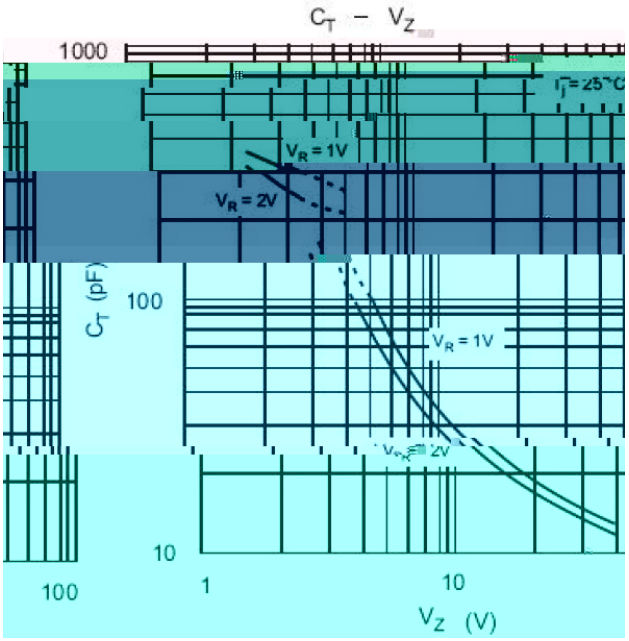
1. Device mounted on FR-4 PC board with recommended pad layout.
2. Short duration test pulse used to minimize self-heating effect.
3. f = 1KHz.
4. Valid provided the terminals are kept at ambient temperature.

Ô ? d • Ž ¢ / Electrical Characteristic Curve









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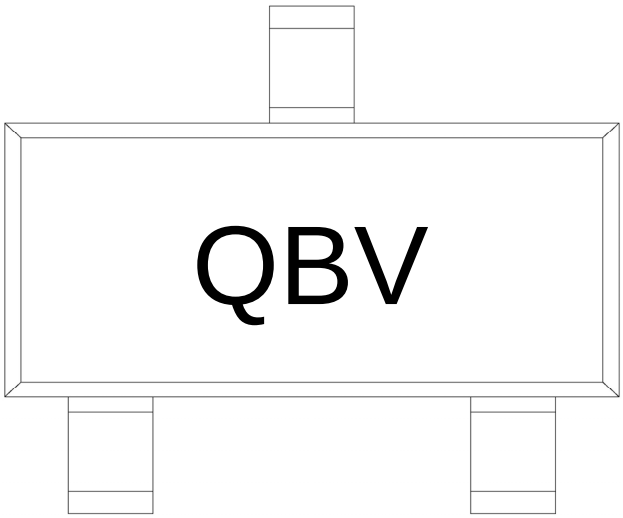
, M y ƒ / Marking Instructions



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Note:

Q: Automobile halogen-free product Code

BV: Product Type