

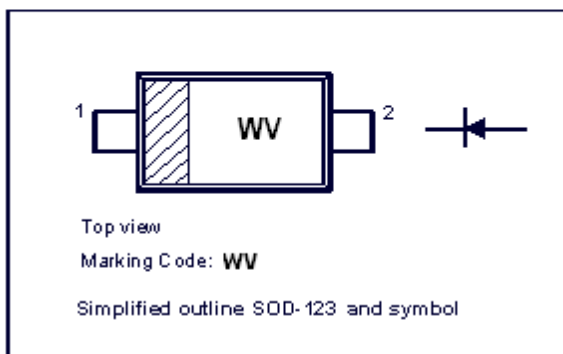
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SILICON EPITAXIAL PLANAR DIODE

Fast switching diode

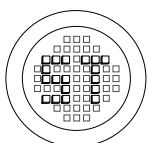
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb} = 25^\circ\text{C}$ and $f/50 \text{ Hz}$	I_O	150	mA
Surge Forward Current at $t < 1\text{s}$ and $T_j = 25^\circ\text{C}$	I_{FSM}	500	mA
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	?
Storage Temperature Range	T_s	-65 to +175	?



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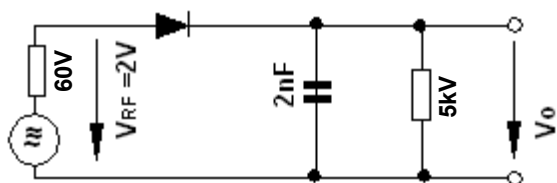
РАДИОТЕХ

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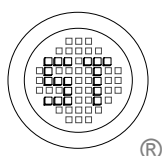
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Characteristics at $T_j = 25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 5\text{mA}$ at $I_F = 10\text{mA}$	V_F	0.62	-	0.72	V
	V_F	-	-	1	V
Leakage Current at $V_R = 20\text{V}$ at $V_R = 75\text{V}$ at $V_R = 20\text{V}, T_j = 150^\circ\text{C}$	I_R	-	-	25	nA
	I_R	-	-	5	μA
	I_R	-	-	50	μA
Reverse Breakdown Voltage tested with $100\mu\text{A}$ Pulses	$V_{(BR)R}$	100	-	-	V
Capacitance at $V_F = V_R = 0$	C_{tot}	-	-	4	pF
Reverse Recovery Time from $I_F = 10\text{mA}$ to $I_R = 1\text{mA}$, $V_R = 6\text{V}$, $R_L = 100\Omega$	t_{rr}	-	-	4	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	-	-	350	K/W
Rectification Efficiency at $f = 100\text{MHz}$, $V_{RF} = 2\text{V}$	η_v	0.45	-	-	-



Rectification Efficiency Measurement Circuit



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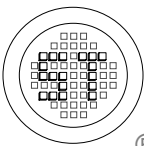
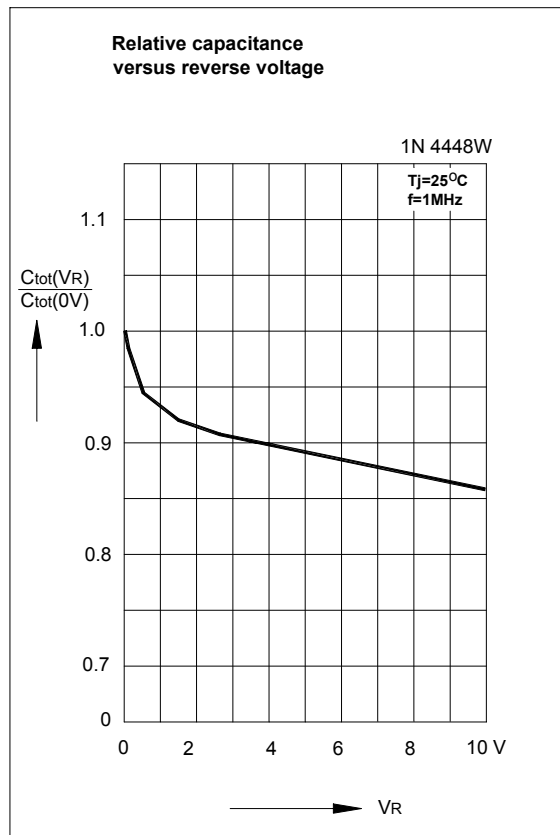
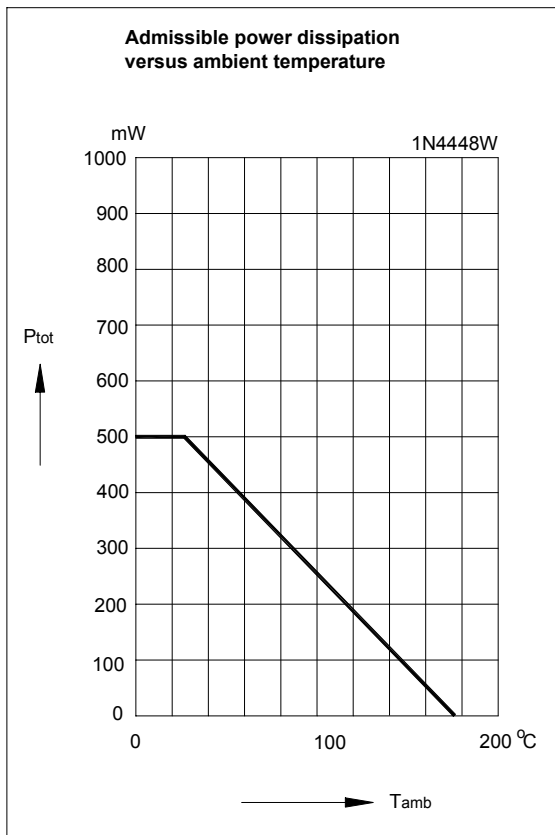
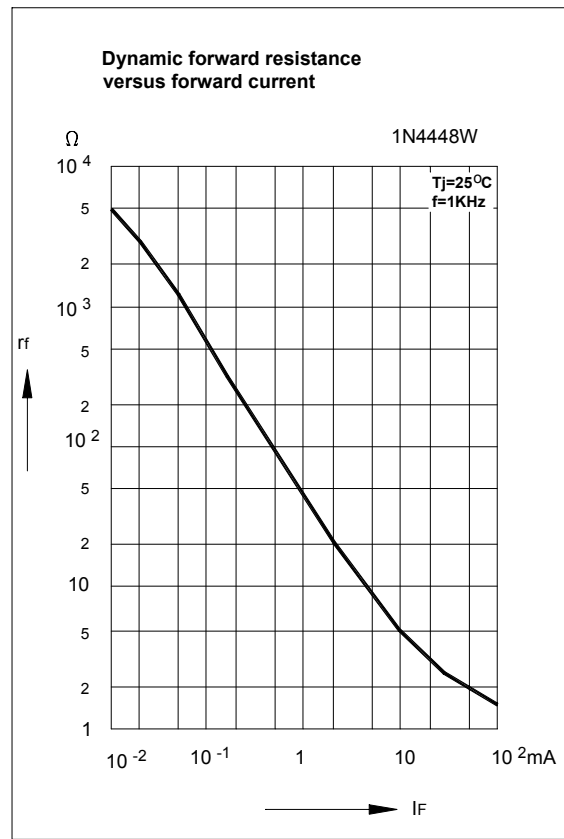
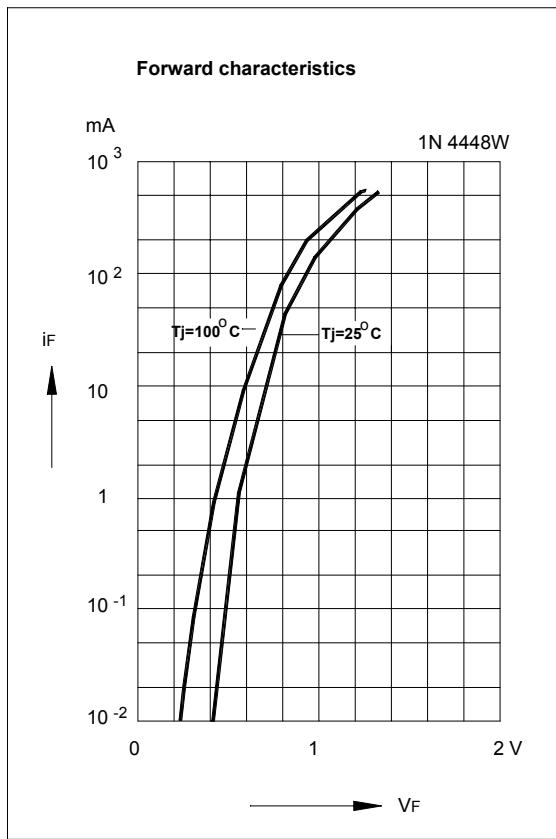


ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 555-196-01-00-104

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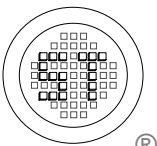
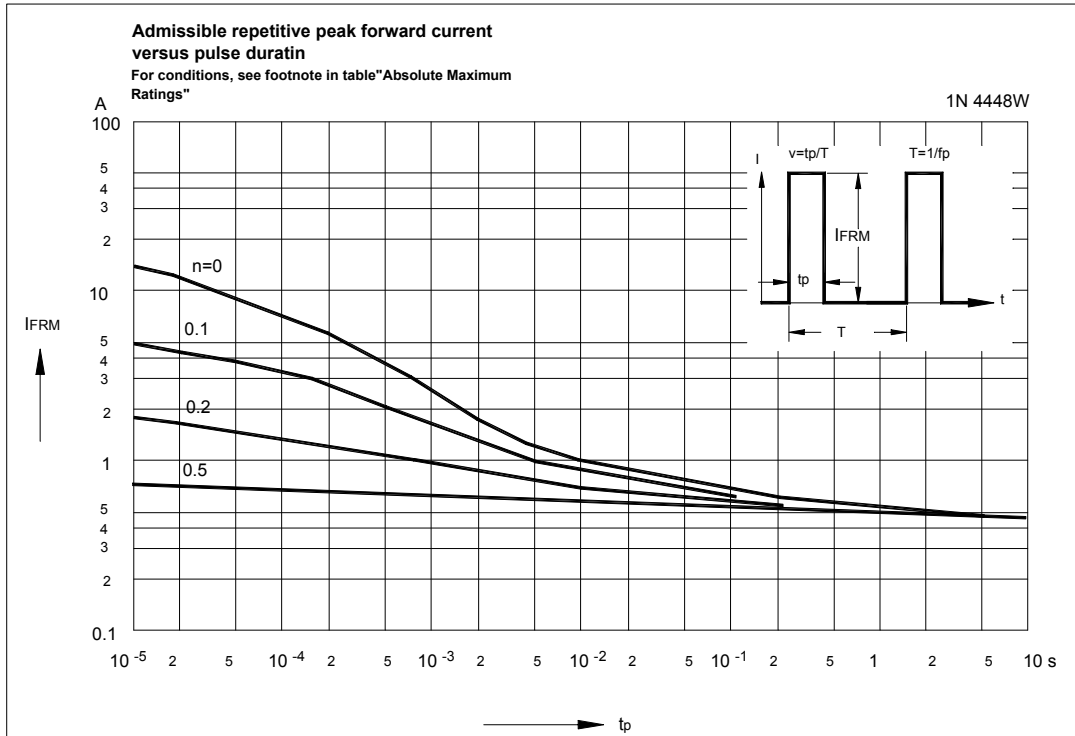
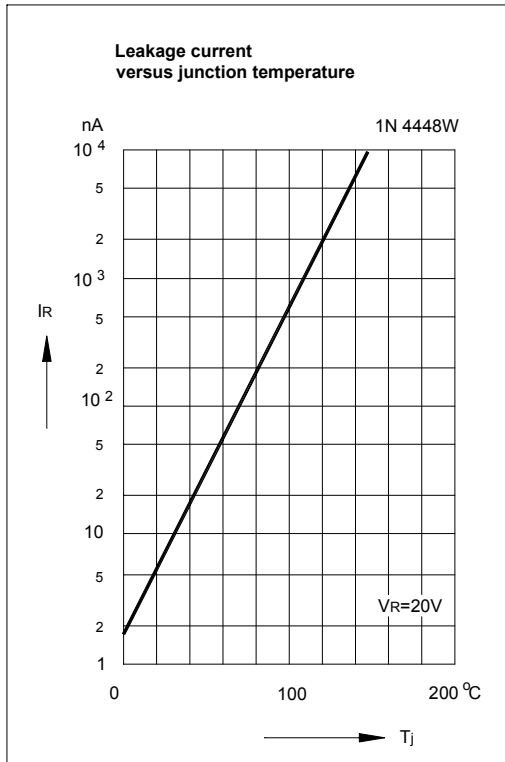


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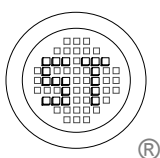
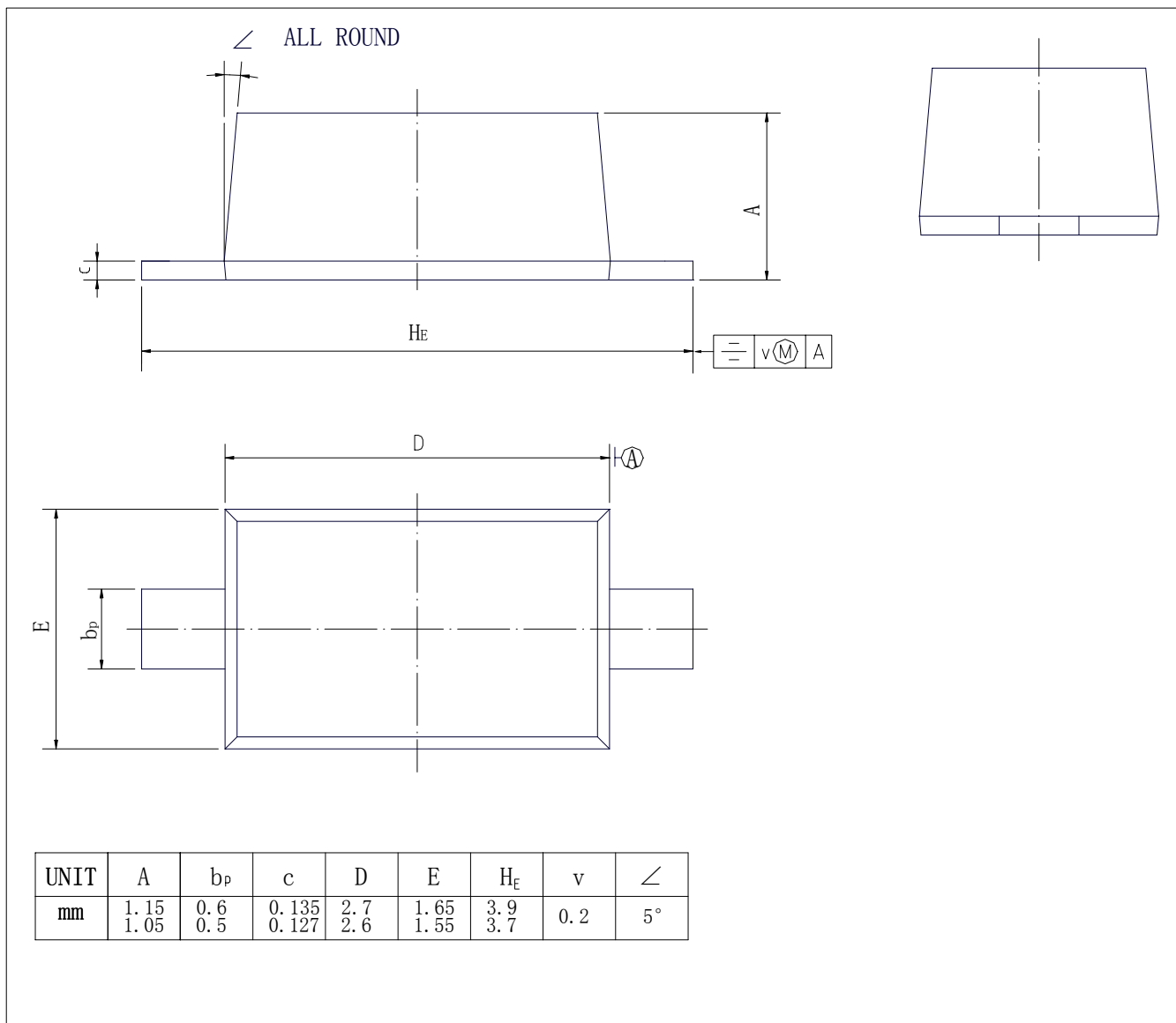
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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



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Dated : 16/04/2005 G