

گروه فنی مهندسی جوش و برش مقدم

اعتماد از شما کیفیت و تخصص از ما



09153223758



051-37581400



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مشهد خیام شمالی 63 خیابان پردیس 3

برای کسب اطلاعات بیشتر بر روی لینک ها کلیک کنید

- 7 سال سابقه آموزش تعمیرات تخصصی دستگاه های جوش اینورتری تک فاز و 3 فاز
- 7 سال سابقه فروش قطعات الکترونیکی دستگاه جوش تک فاز و 3 فاز
- آموزش تخصصی تحلیل دستگاه های جوش اینورتری مختص ابراز فروشان
- آموزش تخصصی ابراز آلات شارژی

Small Signal Fast Switching Diodes



FEATURES

- Silicon epitaxial planar diode
- Electrically equivalent diode: 1N914
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912


 RoHS
COMPLIANT
FREE

APPLICATIONS

Extreme fast switches

LINKS TO ADDITIONAL RESOURCES


[Order Samples](#)

MECHANICAL DATA

Case: DO-35 (DO-204AH)

Weight: approx. 105 mg

Cathode band color: black

Packaging codes / options:

TR/10K per 13" reel (52 mm tape), 50K/box

TAP/10K per ammpack (52 mm tape), 50K/box

PARTS TABLE

PART	ORDERING CODE	TYPE MARKING	CIRCUIT CONFIGURATION	REMARKS
1N4148	1N4148-TAP or 1N4148TR	V4148	Single	Tape and reel / ammpack

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Repetitive peak reverse voltage		V_{RRM}	100	V
Reverse voltage		V_R	75	V
Peak forward surge current	$t_p = 1\text{ }\mu\text{s}$	I_{FSM}	2	A
Repetitive peak forward current		I_{FRM}	500	mA
Forward continuous current		I_F	300	mA
Average forward current	$V_R = 0$	$I_{F(AV)}$	150	mA
Power dissipation	$l = 4\text{ mm}, T_L = 45\text{ }^{\circ}\text{C}$	P_{tot}	440	mW
	$l = 4\text{ mm}, T_L \leq 25\text{ }^{\circ}\text{C}$	P_{tot}	500	mW

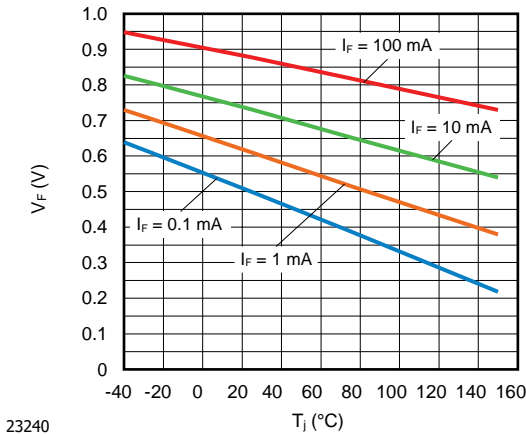
THERMAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air	$l = 4\text{ mm}, T_L = \text{constant}$	R_{thJA}	350	K/W
Junction temperature		T_j	175	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-65 to +150	$^{\circ}\text{C}$

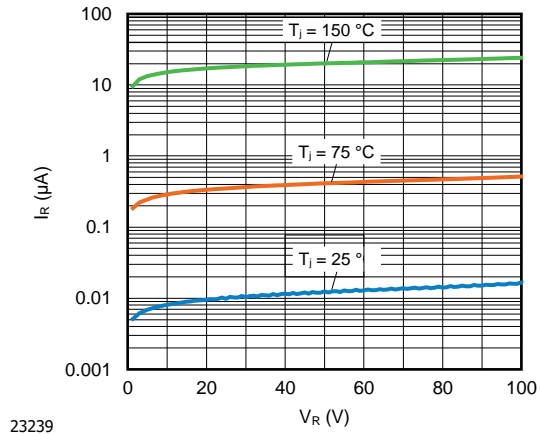


ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I _F = 10 mA	V _F			1	V
Reverse current	V _R = 20 V	I _R			25	nA
	V _R = 20 V, T _j = 150 °C	I _R			50	μA
	V _R = 75 V	I _R			5	μA
Breakdown voltage	I _R = 100 μA, t _p /T = 0.01, t _p = 0.3 ms	V _(BR)	100			V
Diode capacitance	V _R = 0 V, f = 1 MHz, V _{HF} = 50 mV	C _D			4	pF
Rectification efficiency	V _{HF} = 2 V, f = 100 MHz	η _r	45			%
Reverse recovery time	I _F = I _R = 10 mA, i _R = 1 mA	t _{rr}			8	ns
	I _F = 10 mA, V _R = 6 V, i _R = 0.1 x I _R , R _L = 100 Ω	t _{RT}			4	ns

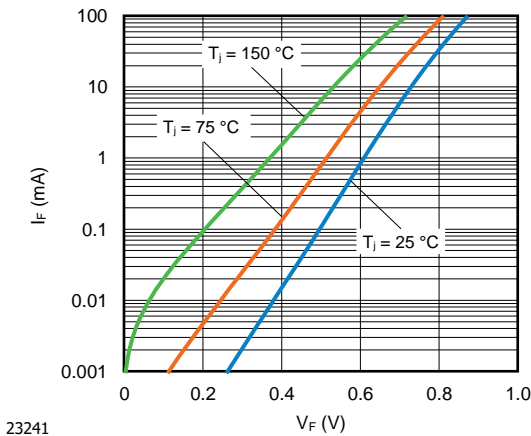
TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)



23240 Fig. 1 - Typical Forward Voltage vs. Junction Temperature



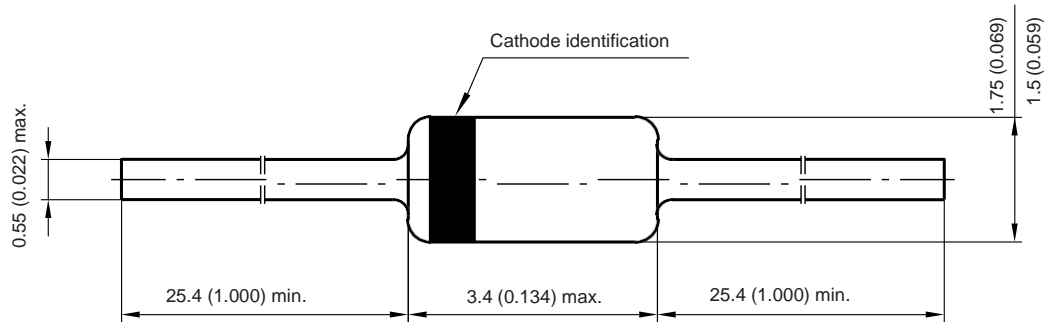
23239 Fig. 3 - Typical Reverse Leakage Current vs. Reverse Voltage



23241 Fig. 2 - Forward Current vs. Forward Voltage



PACKAGE DIMENSIONS in millimeters (inches): DO-35 (DO-204AH)



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