Band Switching Diodes

94 9367

FEATURES

- Silicon planar diodes
- Low dynamic forward resistance
- Low diode capacitance
- High reverse impedance
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

RoHS COMPLIANT
HALOGEN FREE

MECHANICAL DATA

Case: DO-35

Weight: approx. 125 mg

Cathode band color: black

Packaging codes/options:
TR/10K per 13" reel (52 mm tape), 50K/box
TAP/10K per ammopack (52 mm tape), 50K/box

APPLICATIONS

- Band switching in VHF-tuners

PARTS TABLE

PART	TYPE DIFFERENTIATION	ORDERING CODE	TYPE MARKING	REMARKS
BA282	r_f at I_F 3 mA = max. 0.7 Ω	BA282-TR or BA282-TAP	BA282	Tape and reel/ammopack
BA283	r_f at I_F 3 mA = max. 1.2 Ω	BA283-TR or BA283-TAP	BA283	Tape and reel/ammopack

ABSOLUTE MAXIMUM RATINGS (1)

PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	35	V
Forward continuous current		I_F	100	mA

Note
(1) T_{amb} = 25 °C, unless otherwise specified

THERMAL CHARACTERISTICS (1)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air	l = 4 mm, T_L = constant	R_{thJA}	350	K/W
Junction temperature		T_j	150	°C
Storage temperature range		T_{stg}	- 55 to + 150	°C

Note
(1) T_{amb} = 25 °C, unless otherwise specified

ELECTRICAL CHARACTERISTICS (1)

PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I_F = 100 mA		V_F			1000	mV
Reverse current	V_R = 20 V		I_R			50	nA
Diode capacitance	f = 100 MHz, V_R = 1 V		C_D			1.5	pF
	f = 100 MHz, V_R = 3 V	BA282	C_D			1.25	pF
		BA283	C_D			1.2	pF
Dynamic forward resistance	f = 200 MHz, I_F = 3 mA	BA282	r_f			0.7	Ω
		BA283	r_f			1.2	Ω
	f = 200 MHz, I_F = 10 mA	BA282	r_f			0.5	Ω
		BA283	r_f			0.9	Ω
Reverse impedance	f = 100 MHz, V_R = 1 V		z_R	100			kΩ

Note

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

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

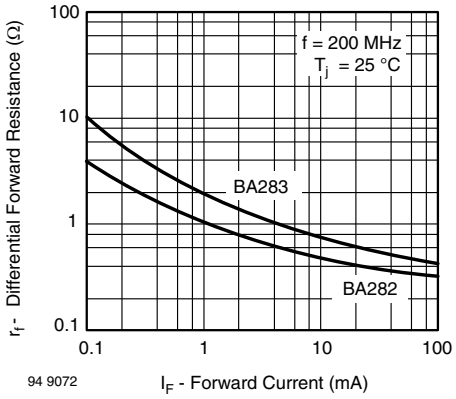


Fig. 1 - Dynamic Forward Resistance vs. Forward Current

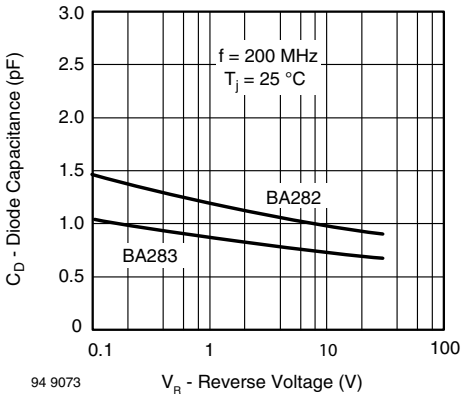
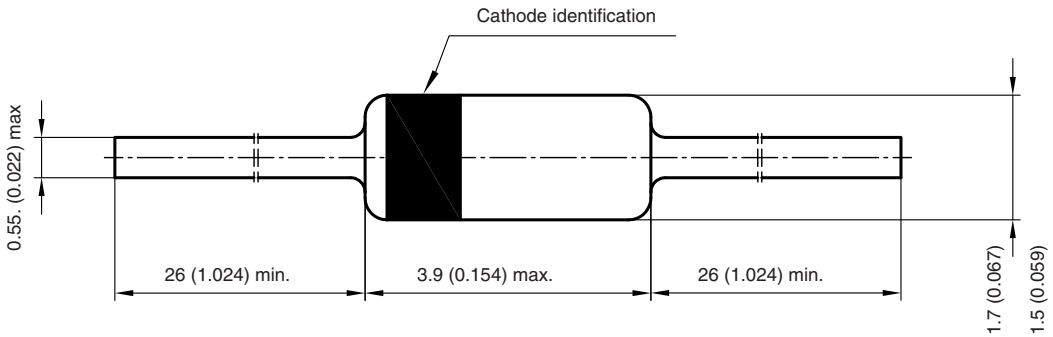


Fig. 2 - Diode Capacitance vs. Reverse Voltage

PACKAGE DIMENSIONS in millimeters (inches): DO-35



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