

1N6704
1N6704R

Features

- passivated mesa structure for very low leakage currents
- Epitaxial structure minimizes forward voltage drop
- Hermetically sealed surface mount power package
- Low package inductance
- Very low thermal resistance
- Available as standard polarity (strap-to-anode, 1N6704) and reverse polarity (strap-to-cathode: 1N6704R)

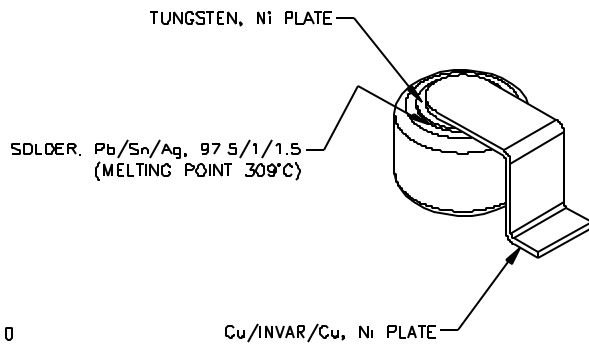
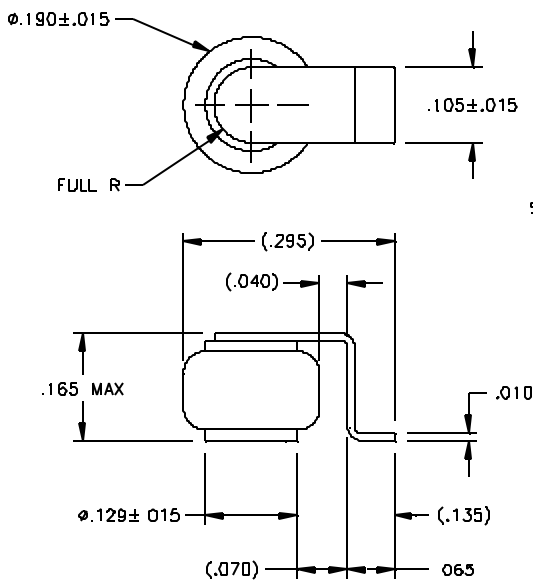
200 Volts
20 Amps
35 ns

**ULTRAFAST
 RECTIFIER**

Maximum Ratings @ 25°C (unless otherwise specified)

DESCRIPTION	SYMBOL	MAX.	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	200	Volts
Working Peak Reverse Voltage	V_{RWM}	200	Volts
DC Blocking Voltage	V_R	200	Volts
Average Rectified Forward Current, $T_c \leq 125^\circ\text{C}$	$I_{F(ave)}$	20	Amps
Nonrepetitive Peak Surge Current, $t_p = 8.3$ ms, half-sinewave	I_{FSM}	100	Amps
Junction Temperature Range	T_j	-65 to +175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +175	$^\circ\text{C}$
Thermal Resistance, Junction to Case:	θ_{JC}	2.0 (typ. 1.6)	$^\circ\text{C/W}$

Mechanical Outline



G-BODY (DO-217AA)

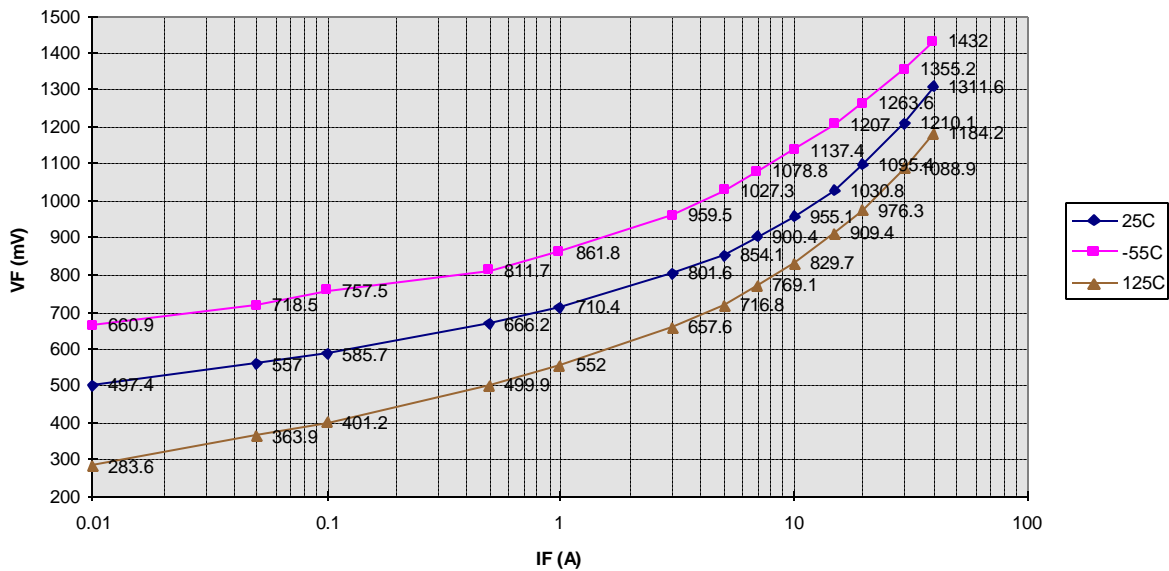
1N6704 1N6704R

Electrical Parameters

PRELIMINARY

DESCRIPTION	SYMBOL	CONDITIONS	MIN	TYP.	MAX	UNIT
Reverse (Leakage) Current	IR ₂₅	VR= 200 Vdc, Tc= 25°C		0.12	3	µA
	IR ₁₂₅	VR= 200 Vdc, Tc= 125°C		60	150	µA
Forward Voltage pulse test, pw= 300 µs d/c≤ 2%	VF1	IF= 10 mA, Tc= 25°C		500	-	mV
	VF2	IF= 100 mA, Tc= 25°C		590	-	mV
	VF3	IF= 3 A, Tc= 25°C		810	-	mV
	VF4	IF= 5 A, Tc= 25°C		860	910	mV
	VF5	IF= 10 A, Tc= 25°C		960	1020	mV
	VF6	IF= 20 A, Tc= 25°C		1100	1250	mV
	VF7	IF= 40 A, Tc= 25°C		930	1000	mV
	VF8	IF= 5 A, Tc= -55°C		1050	1200	mV
	VF9	IF= 10 A, Tc= -55°C		1150	1300	mV
	VF10	IF= 20 A, Tc= -55°C		1300	1450	mV
	VF11	IF= 5 A, Tc= 125°C		720	800	mV
	VF12	IF= 10 A, Tc= 125°C		830	910	mV
	VF13	IF= 20 A, Tc= 125°C		980	1070	mV
Junction Capacitance	Cj1	VR= 10 Vdc		80	100	pF
Breakdown Voltage	BVR	IR= 100 µA, Tc= 25°C	220	250	n/a	V
Reverse Recovery Time	trr	IF= .5 A, IR= 1 A, IRR= .25 A		25	35	ns

typical VF





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.