DESCRIPTION

The MI204 PIN diode is employing a high reliability glass construction designed for RF small signal attenuator in VHF UHF.

FEATURES

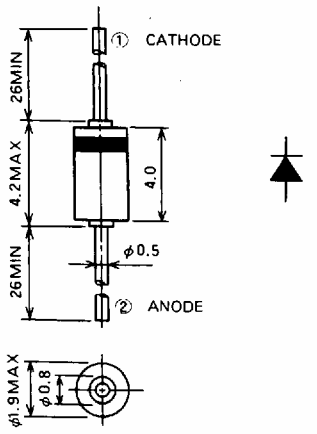
- Long carrier lifetime
- Low distortion
- Large dynamic range

APPLICATION

RF attenuator RF switching

OUTLINE DRAWING

Dimension: mm



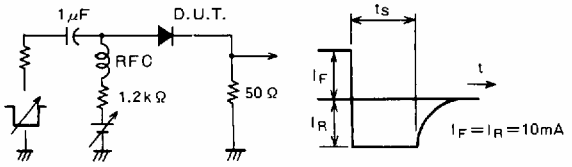
ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V_{RM}	Repetitive peak reverse voltage	30	V
V_R	Reverse voltage	28	V
P	Power dissipation	200	mW
T_j	Junction temperature	175	°C
T_{stg}	Storage temperature	−55 to 175	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

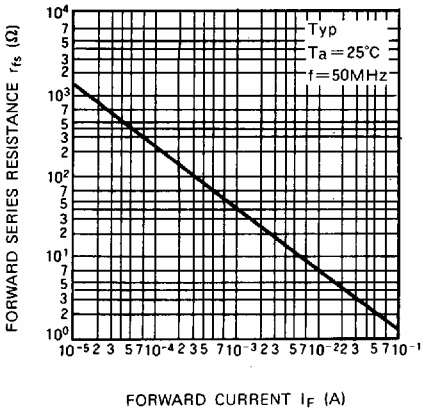
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
I_{R1}	Reverse current	V_R=30V			10	μA
I_{R2}	Reverse current	V_R=28V			0.5	μA
V_F	Forward voltage	I_F=100mA			1.0	V
r_{fs1}	Forward series resistance	I_F=10mA, f=50MHz		5.5	10	Ω
r_{fs2}		I_F=10μA, f=50MHz	1.0	1.5		kΩ
C_t	Diode capacitance	V_R=15V, f=1.0MHz		0.7	1.2	pF
τ	Life time	I_F=10mA		2.1		μs
*t_s	Storage time	I_F=10mA, I_R=10mA	0.6	1.5		μs

*

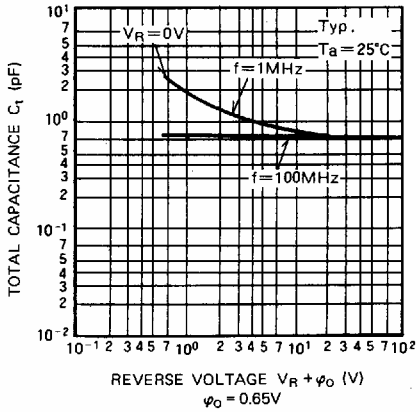


TYPICAL PERFORMANCE DATA

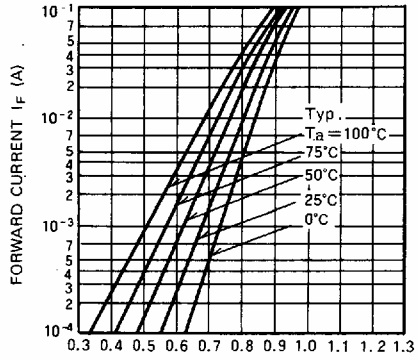
FORWARD SERIES RESISTANCE VS. FORWARD CURRENT CHARACTERISTICS



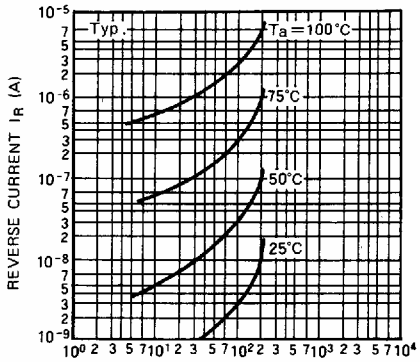
TOTAL CAPACITANCE VS. REVERSE VOLTAGE CHARACTERISTICS



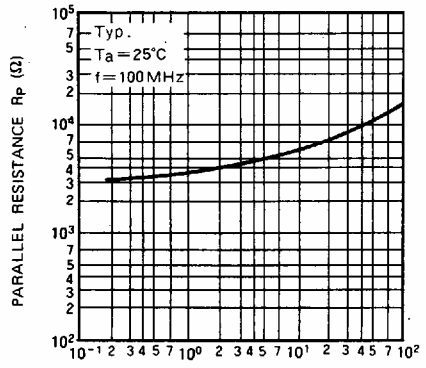
FORWARD CURRENT VS. FORWARD VOLTAGE CHARACTERISTICS



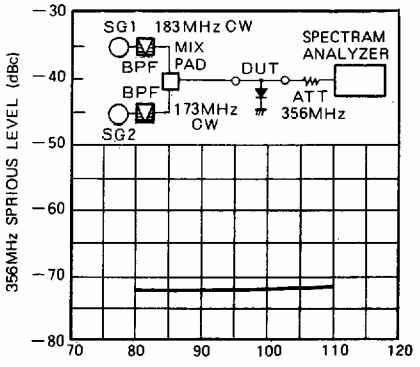
REVERSE CURRENT VS. REVERSE VOLTAGE CHARACTERISTICS



PARALLAEL RESISTANCE VS. REVERSE VOLTAGE CHARACTERISTICS



INTER MODULATION DISTORTION



MITSUBISHI ELECTRIC