SILICON BEAM-LEAD SCHOTTKY BARRIER DETECTOR DIODES

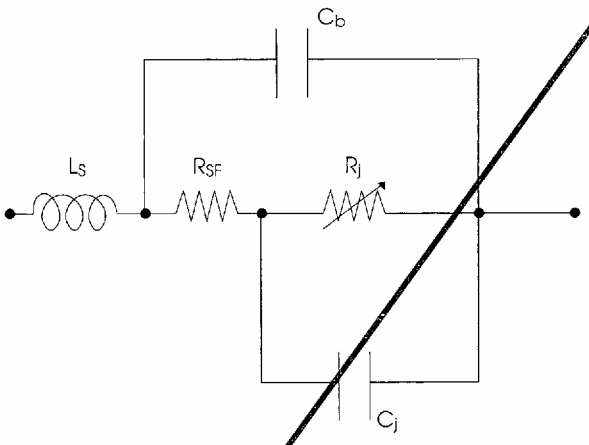
Silicon beam-lead detector diodes are low barrier type. They are glassed to reduce parasitic capacitance and strengthen the leads.

CHARACTERISTICS AT 25°C		FREQUENCY RANGE F_{oper}	TANGENTIAL SENSITIVITY (WIDEBAND) T_{ss}	VIDEO RESIST. R_V		VOLTAGE SENSITIVITY	TOTAL CAPACIT.	THRES-HOLD VOLT. V_T	FORWARD VOLTAGE V_R	SERIES RESIST. R_S	BREAKDOWN VOLTAGE V_{BR}	RF POWER P_{RF}
TEST CONDITIONS		N/A	VIDEO BANDWIDTH = 1 MHz IF = 100 µA			LOAD RESISTANCE = 100 Ω I_F = 0	V = 0 V f = 1 MHz	I_F = 10 µA	I_F = 5 mA		I_R = 10 µA	CW
Type	Case (1)	GHz	dBm	kΩ		mV/µW	pF	mV	mV	Ω	V	mW
			min	min	max	typ	max	typ	max	max	min	max
DP 302	C 104	1-14 14-18	- 49 - 48	0.4	0.6	3	0.1	150	370	20	3	300

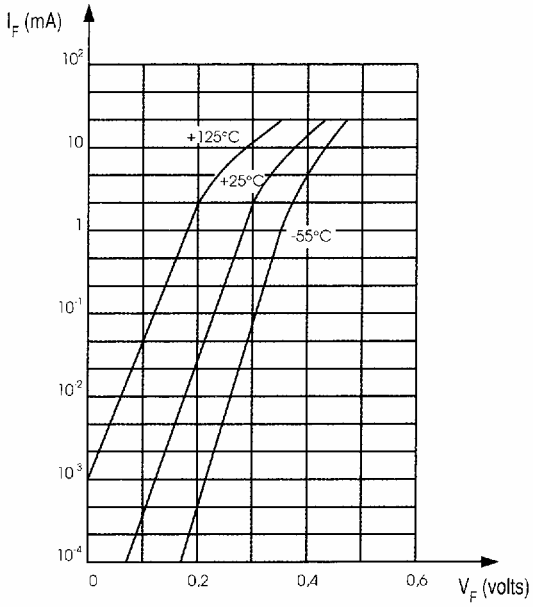
(1) Available in stripline cases on request
(2) Application Note 0027 available on request

TEMPERATURE RANGES :
Operating junction (T_j) : -55° C to +150° C
Storage : -65° C to +175° C

Equivalent electrical circuit for beam-lead Schottky diode



Typical forward voltage vs forward current



R_D : dynamic (total) resistance

R_j : junction resistance $\frac{26}{I_F\ (mA)}$

$R_D : R_j + R_{SF}$

This product family was recently declared obsolete.
For new requests or designs, please call your local Tekelec sales engineer.