



SILICON BEAM-LEAD SCHOTTKY BARRIER DETECTOR DIODES

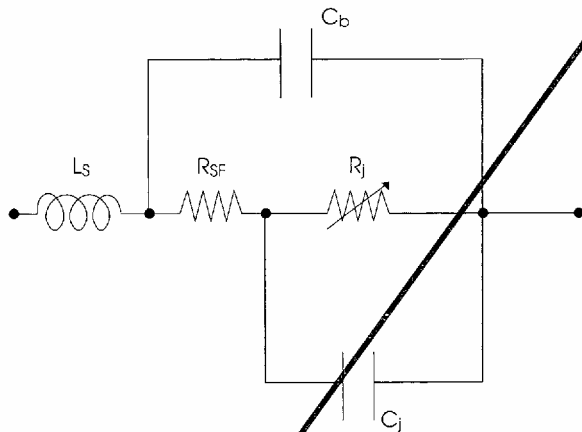
Silicon beam-lead detector diodes are low barrier type. They are glassed to reduce parasitic capacitance and strengthen the leads.

CHARACTERISTICS AT 25°C		FREQUENCY RANGE F_{oper}	TANGENTIAL SENSITIVITY (WIDEBAND) T_{ss}	VIDEO RESIST. R_V	VOLTAGE SENSITIVITY	TOTAL CAPACIT.	THRESHOLD VOLT. V_T	FORWARD VOLTAGE V_R	SERIES RESIST. R_{sf}	BREAKDOWN VOLTAGE V_{BR}	RF POWER P_{RF}	
TEST CONDITIONS		N/A	VIDEO BANDWIDTH = 1 MHz $I_F = 100 \mu A$		LOAD RESISTANCE = 100Ω $I_F = 0$	$V = 0 V$ $f = 1 MHz$	$I_F = 10 \mu A$	$I_F = 5 mA$		$I_R = 10 \mu A$	CW	
Type	Case (1)	GHz	dBm	k Ω		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

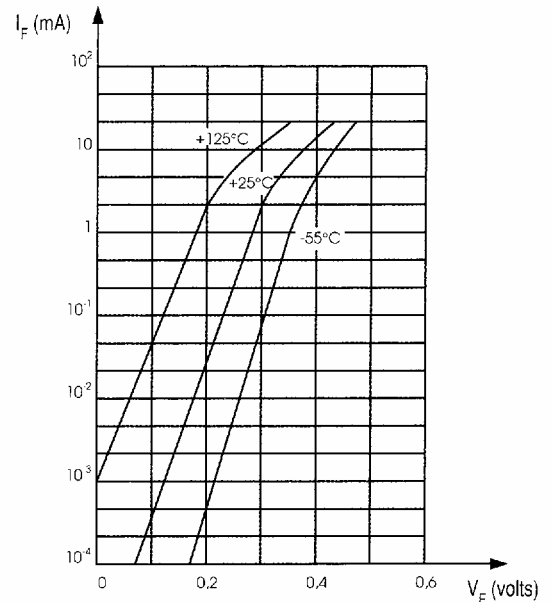
- (1) Available in stripline cases on request
- (2) Application Note 0027 available on request

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 $\frac{26}{I_F \text{ (mA)}}$

$R_D = R_j + R_{SF}$

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