

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

Application

Ultra high speed switching

Features

Four types of packaging are available.

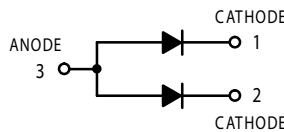
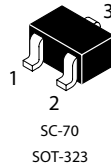
High speed. ($t_r=1.5\text{ns Typ.}$)

Suitable for high packing density layout.

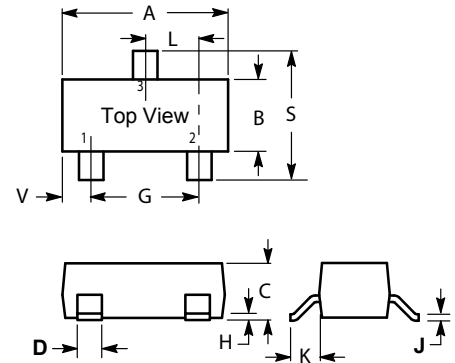
High reliability.

Construction

Silicon epitaxial planar



Marking code: P, MO



MAXIMUM RATINGS (EACH DIODE)

Rating	Symbol	Value	Unit
Peak reverse voltage	V_{RM} (V)	80	Vdc
DC reverse voltage	V_R (V)	80	Vdc
Peak forward current	I_{FM} (mA)	300	mAdc
Mean rectifying current	I_o (mA)	100	
Surge current	I_{surge} (A)	4	mW
Power dissipation (TOTAL)	P_d (mW)	200	mW
Junction temperature	$T_j(^{\circ}\text{C})$	150	$^{\circ}\text{C}$
Storage temperature	$T_{stg}(^{\circ}\text{C})$	-55~+155	$^{\circ}\text{C}$
P / N Type		N	

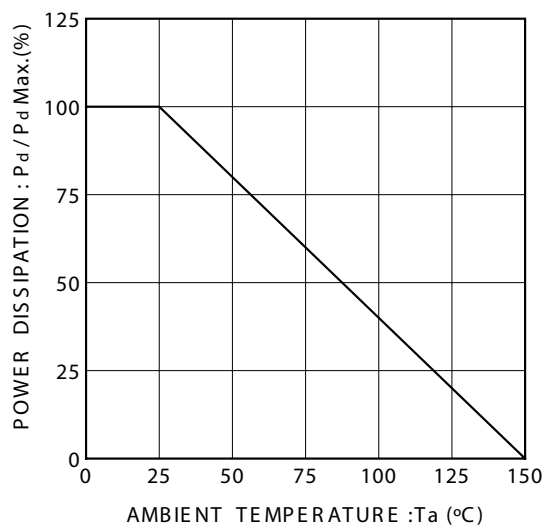
SOT-323(SC-70)		
Dim	Min	Max
A	1.800	2.200
B	1.150	1.350
C	0.800	1.000
D	0.300	0.400
G	1.200	1.400
H	0.000	0.100
J	0.100	0.250
K	0.350	0.500
L	0.590	0.720
S	2.000	2.400
V	0.280	0.420
All Dimension in mm		

ELECTRICAL CHARACTERISTICS (TA=25 unless otherwise noted) (EACH DIODE)

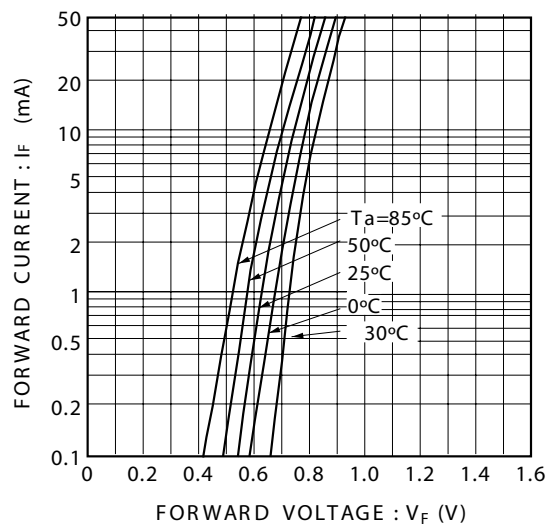
Characteristic	Symbol	Min	Max	Unit
Forward voltage ($I_F = 100$)	V_F (V)	—	1.2	Vdc
Reverse current ($I_R = 70\mu\text{A}$)	I_R	—	0.1	μAdc
Capacitance between terminals ($V_R = 6, f = 1.0 \text{ MHz}$)	$C_T(\text{pF})$	—	3.5	mVdc
Reverse recovery time ($V_R = 6, f = 5.0 \text{ MHz}$)	$t_{rr}(\text{ns})$	—	4	

1. FR-5 = 1.0 X 0.75 X 0.062 in. 2.Alumina = 0.4 X 0.3 X 0.024 in. 99.5% alumina.

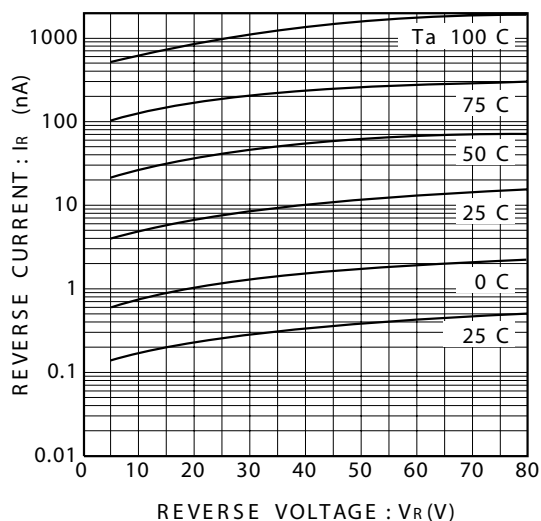
Electrical characteristic curves (Ta=25°C)



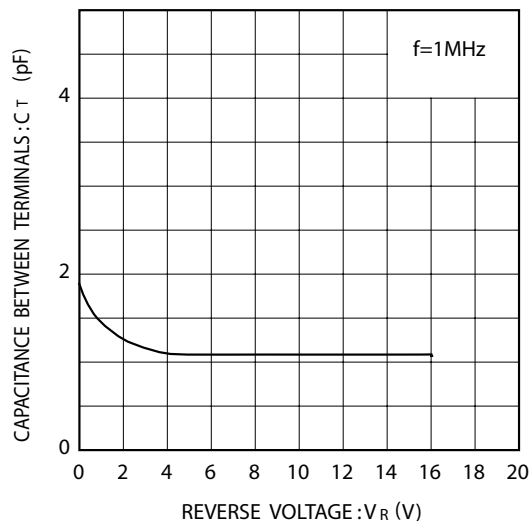
Power attenuation curve



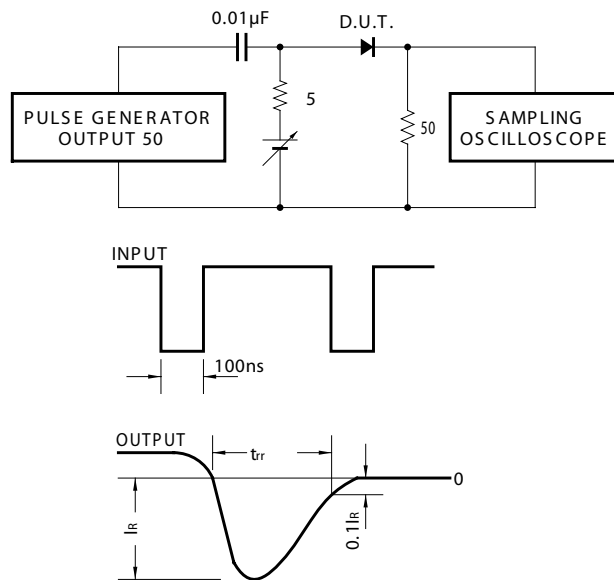
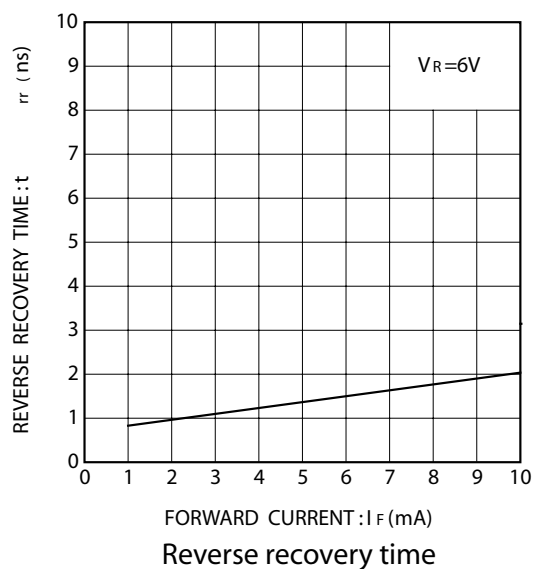
Forward characteristics



Reverse characteristics



Capacitance between terminals characteristics



Reverse recovery time (t_{rr}) measurement circuit