

RoHS Compliant Product

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

**Application**

Ultra high speed switching

**Features**

Four types of packaging are available.

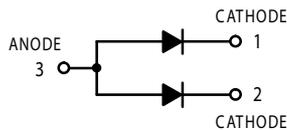
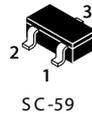
High speed. ( $t_r=1.5ns$  Typ.)

Suitable for high packing density layout.

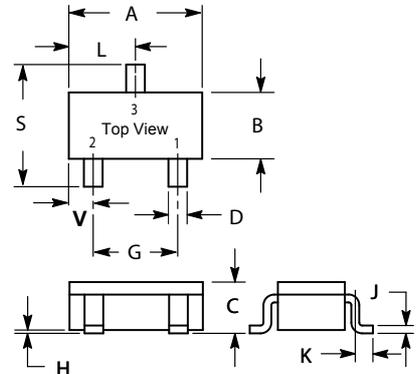
High reliability.

**Construction**

Silicon epitaxial planar



Marking code: 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	$T_j$ (°C)	150	°C
Storage temperature	$T_{stg}$ (°C)	-55~+155	°C
P / N Type		N	

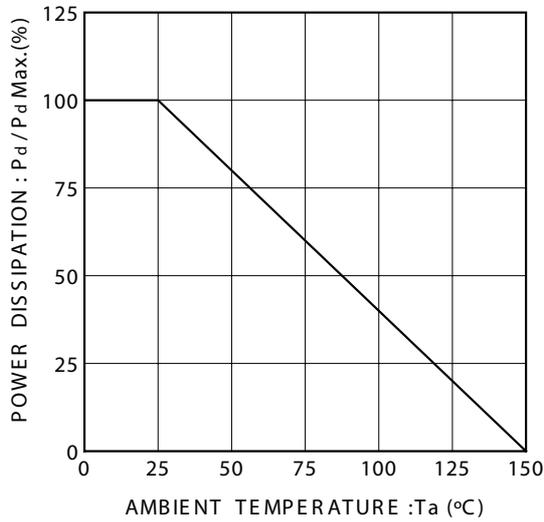
SC-59		
Dim	Min	Max
A	2.700	3.100
B	1.300	1.700
C	1.000	1.300
D	0.350	0.500
G	1.700	2.300
H	0.000	0.100
J	0.100	0.260
K	0.200	0.600
L	1.250	1.650
S	2.250	3.000
V	0.400	0.450
All Dimension in mm		

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

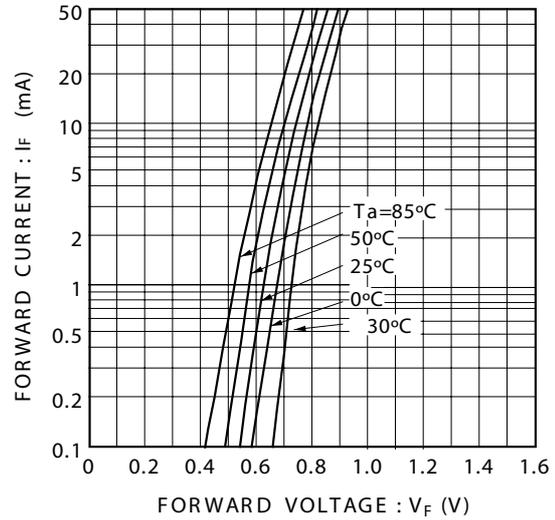
Characteristic	Symbol	Min	Max	Unit
Forward voltage ( $I_F = 100$ )	$V_F$ (V)	—	1.2	Vdc
Reverse current ( $I_R = 70\mu A$ )	$I_R$	—	0.1	$\mu A_{dc}$
Capacitance between terminals ( $V_R = 6, f = 1.0$ MHz)	$C_T$ (pF)	—	3.5	mVdc
Reverse recovery time ( $V_R = 6, f = 5.0$ MHz)	$t_{rr}$ (ns)	—	4	

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.

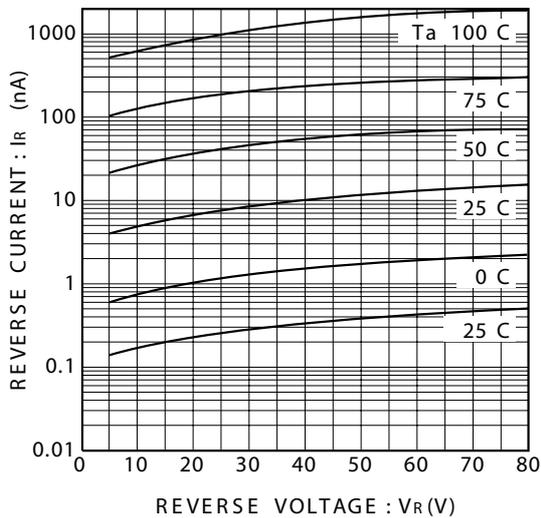
Electrical characteristic curves (Ta=25°C)



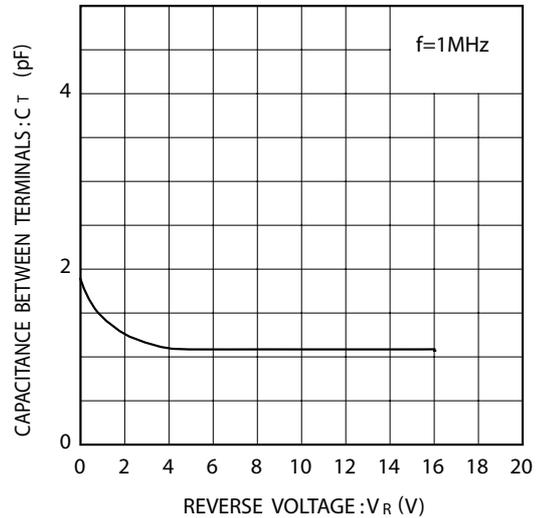
Power attenuation curve



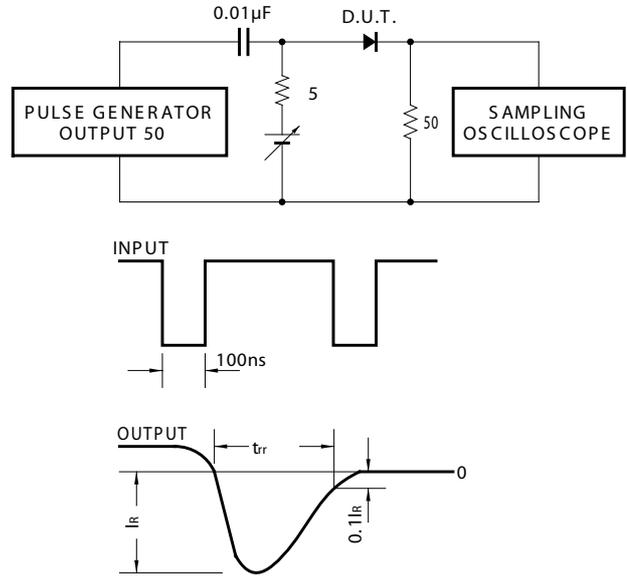
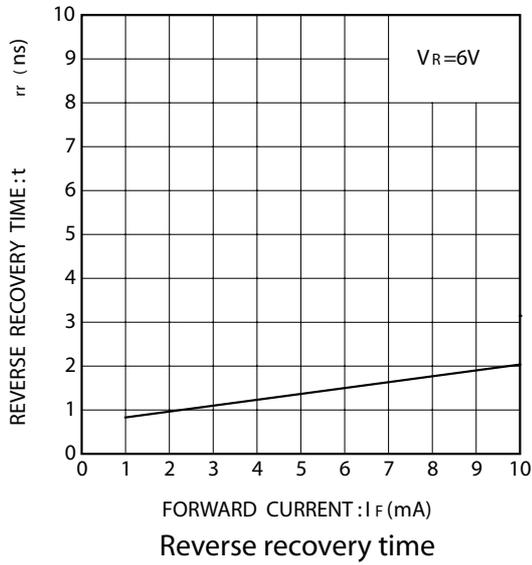
Forward characteristics



Reverse characteristics



Capacitance between terminals characteristics



Reverse recovery time ( $t_r$ ) measurement circuit