



Micro Commercial Components



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**1SS133**

**High Speed  
 Switching Diode**

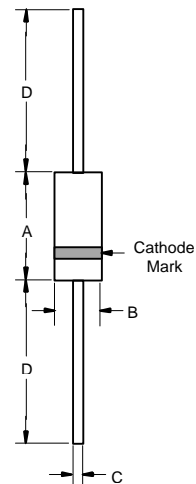
**Features**

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Glass sealed envelope.
- High speed. ( $t_{rr}=1.2ns$  Typ)
- High reliability.
- Silicon epitaxial planar
- Marking : Cathode band and type number
- Moisture Sensitivity Level 1

**Absolute maximum Ratings**

Symbol	Rating	Rating	Unit
$V_{RM}$	Peak Reverse Voltage	90	V
$V_R$	DC Reverse Voltage	80	V
$I_{FM}$	Peak Forward Current	400	mA
$I_o$	Mean Rectifying Current	130	mA
$I_{surge}$	Surge Current (1s)	600	mA
$P_D$	Power Dissipation	300	mW
$T_J$	Operating Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

**DO-35**



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Symbol	Parameter	Min	Max	Units
<b>OFF CHARACTERISTICS</b>				
$V_F$	Forward Voltage ( $I_F=100mA_{dc}$ )	---	1.2	Vdc
$I_R$	Reverse Current ( $V_R=80V_{dc}$ )	---	0.5	$\mu A_{dc}$
$C_T$	Capacitance Between Terminals ( $V_R=0.5V_{dc}$ , $f=1.0MHz$ )	---	2.0	pF
$t_{rr}$	Reverse Recovery Time ( $V_R=6.0V_{dc}$ , $I_F=10mA_{dc}$ , $R_s=50\Omega$ )	---	4.0	ns

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

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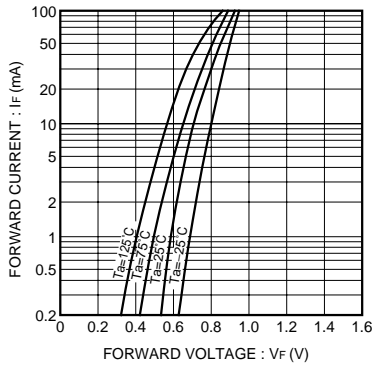


Fig. 1 Forward characteristics

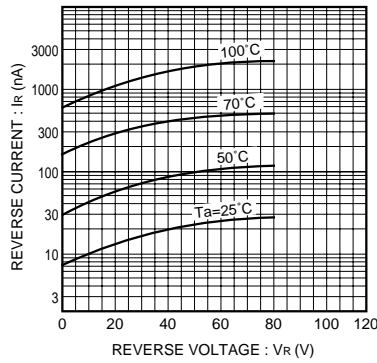


Fig. 2 Reverse characteristics

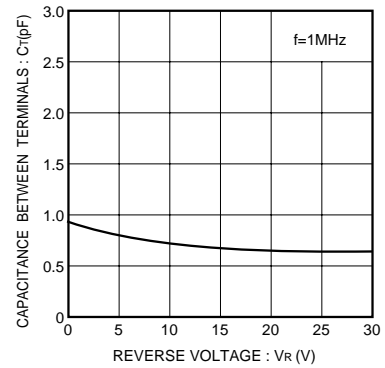


Fig. 3 Capacitance between terminals characteristics

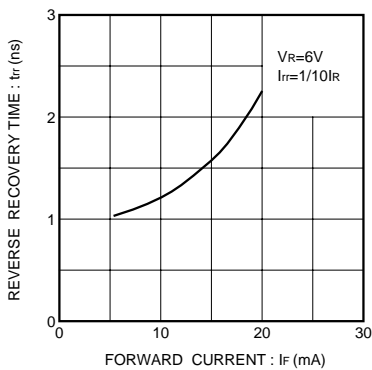


Fig. 4 Reverse recovery time characteristics

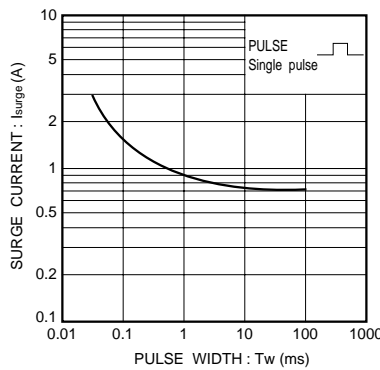


Fig. 5 Surge current characteristics

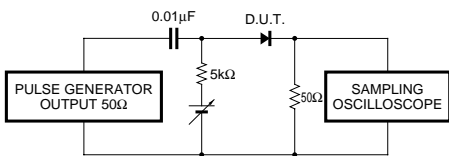


Fig. 6 Reverse recovery time ( $t_r$ ) measurement circuit



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/AmmoBox
Part Number-BP	Bulk: 100Kpcs/Carton

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