

# Alternator Diode

## Type: ZSM50C22 / ZSM50C22R

### ■Absolute Maximum Ratings

Item	Symbols	Units	Ratings	CONDITIONS
Average Forward Current	$I_{F(AV)}$	A	50	Single-phase half sine wave, $T_c \leq 205^\circ\text{C}$
Peak Forward Current	$I_{F(PE)}$	A	157	Single-phase half sine wave, 50% duty, $T_{cmax}=205^\circ\text{C}$
Reverse surge Capability	$V_{RSM}$	V	97	One pulses only
Operating Case Temperature	$T_c$	$^\circ\text{C}$	-40 ~ +205	
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-40 ~ +205	

### ■CHARACTERISTICS( $T_c=25^\circ\text{C}$ , But except an item of table 1)

Item	Symbols	Units	Min.	Max.	CONDITIONS
Zener Voltage	$V_z$	V	20.0	23.0	$I_z=10\text{mA}$
Zener Voltage Temperature Characteristics	$V_z$	V	Table 1		$I_z=10\text{mA}$ $T_c=-40 \sim +205^\circ\text{C}$
Forward On Voltage	$V_{FM}$	V	-	1.2	$I_F=100\text{A}$
Peak Leakage Current	$I_{RRM}$	$\mu\text{A}$	-	0.8	$V_{RM}=18\text{V}$

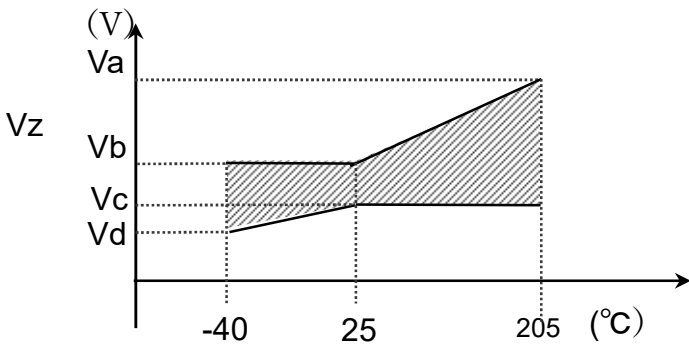


Fig.1 Zener Voltage Temperature Characteristics

Table.1 Zener Voltage Temperature Characteristics

Unit : V

Va	Vb	Vc	Vd
27.1	23.0	20.0	18.5

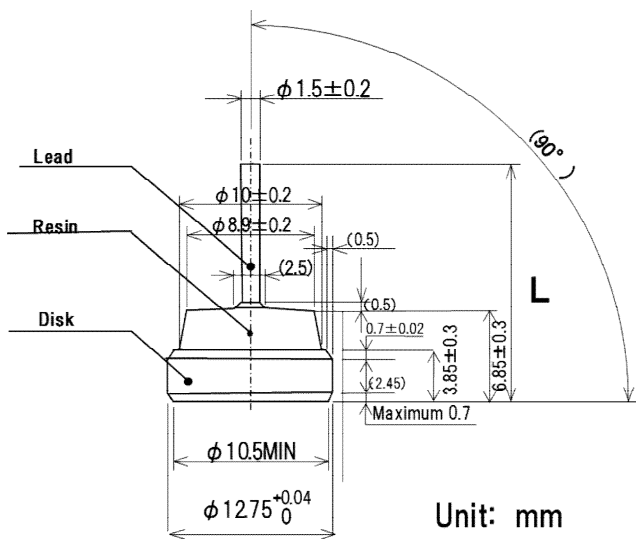


Fig.2 Shape

Table.2 Length of Diode

Type	L(mm)
ZSM50C22	19.2
ZSM50C22R	17.0