

Alternator Diode

Type: ZSM70A22 / ZSM70A22R

■ Absolute Maximum Ratings

Item	Symbols	Units	Ratings	CONDITIONS
Average Forward Current	$I_{F(AV)}$	A	70 ($T_c \leq 205^\circ\text{C}$) 50 ($T_c \leq 225^\circ\text{C}$)	Single-phase half sine wave
Peak Forward Current	$I_{F(PE)}$	A	220	Single-phase half sine wave, 50% duty, $T_{cmax}=205^\circ\text{C}$
Reverse surge Capability	V_{RSM}	V	148	One pulses only
Operating Case Temperature	T_c	$^\circ\text{C}$	-40 ~ +225	
Storage Temperature	T_{stg}	$^\circ\text{C}$	-40 ~ +225	

■ 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	24.0	$I_z=10\text{mA}$
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}	μA	-	0.8	$V_{RM}=18\text{V}$

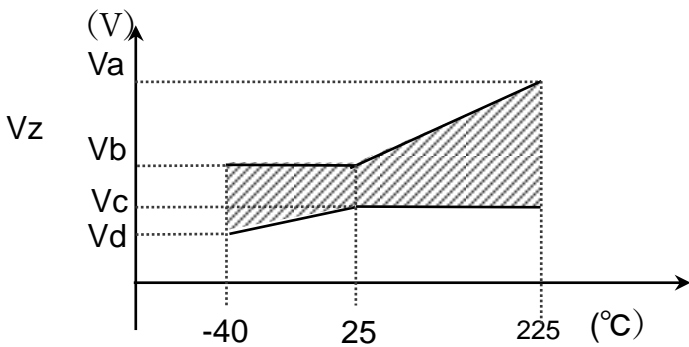


Table.1 Zener Voltage Temperature Characteristics

Unit : V

Va	Vb	Vc	Vd
28.6	24.0	20.0	18.5

Fig.1 Zener Voltage Temperature Characteristics

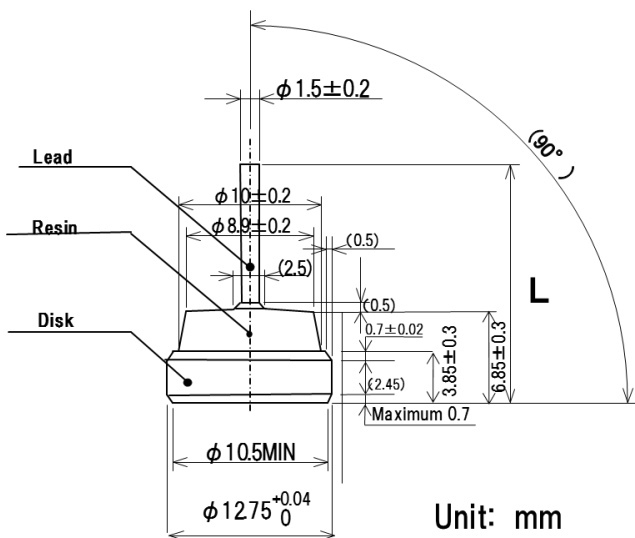


Table.2 Length of Diode

Type	L(mm)
ZSM70A22	19.2
ZSM70A22R	17.0

Fig.2 Shape