

# Fast Recovery Rectifier

## ■ Features

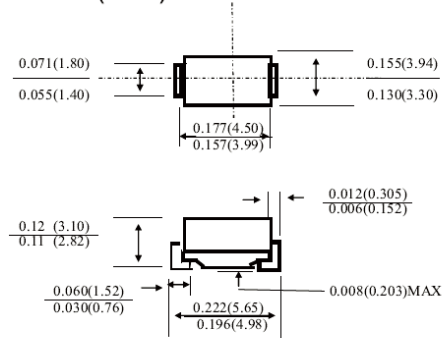
- $I_o$             2.0A
- $V_{RRM}$         50V-1000V
- High surge current capability
- Cases: Molded plastic

## ■ Applications

- Rectifier

## ■ Outline Dimensions and Mark

DO - 214AA(SMB)



inch ( mm )

## ■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	RS2						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, $T_L=110^{\circ}C$	2.0						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz Half-sine wave ,1 cycle , $T_a=25^{\circ}C$	50						
Junction Temperature	$T_J$	$^{\circ}C$		-55~+150						
Storage Temperature	$T_{STG}$	$^{\circ}C$		-55 ~ +150						

## ■ Electrical Characteristics ( $T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	RS2						
				A	B	D	G	J	K	M
Peak Forward Voltage	$V_F$	V	$I_F=2.0A$	1.3						
Maximum reverse recovery time	$t_{rr}$	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	150			250		500	
Peak Reverse Current	$I_{RRM1}$	$\mu A$	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$						
	$I_{RRM2}$			$T_a=100^{\circ}C$						
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient				80 <sup>1)</sup>			
	$R_{\theta J-L}$		Between junction and terminal				20 <sup>1)</sup>			

### Notes:

- 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas



# RS2A ~ RS2M

FIG.1: FORWARD CURRENT DERATING CURVE

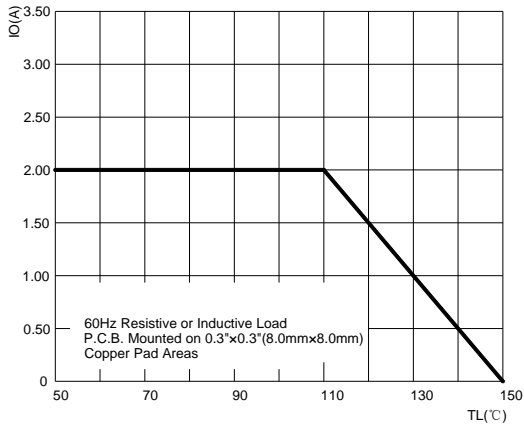


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

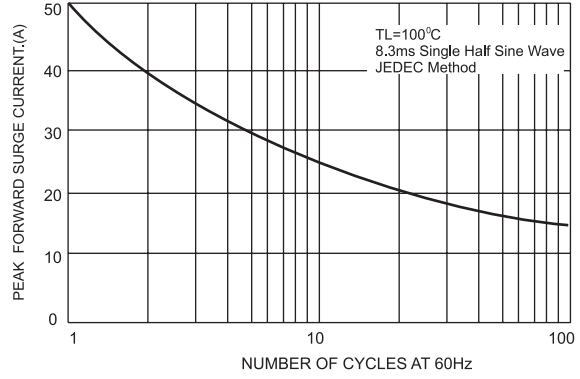


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

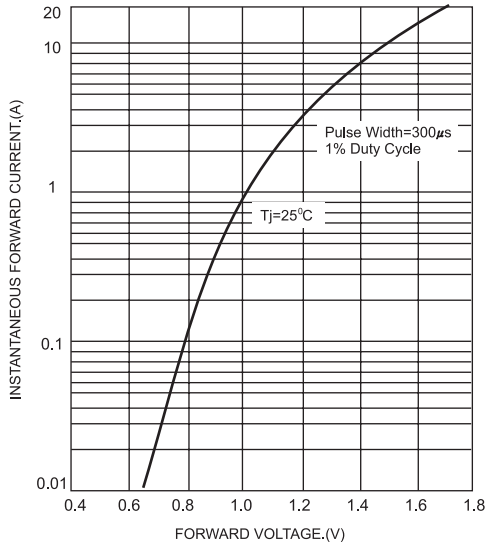


FIG.4-TYPICAL REVERSE CHARACTERISTICS

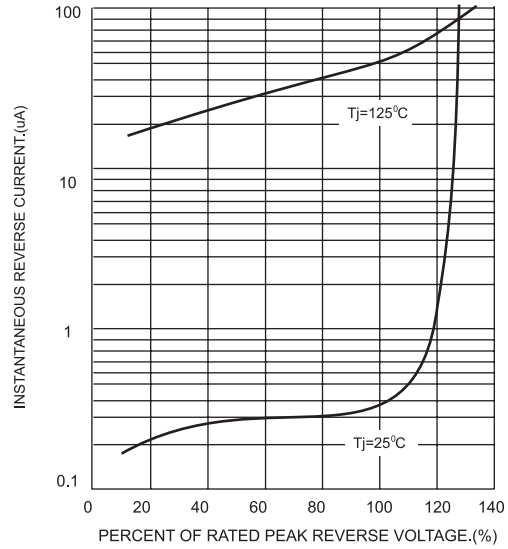


FIG.5-TYPICAL JUNCTION CAPACITANCE

