

Voltage 20V ~ 100V , 3.0 Amper Surface Mount Schottky Barrier Rectifiers

FEATURES

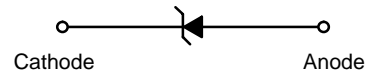
- * For surface mount applications
- * Epitaxial construction
- * Very low forward voltage drop
- * For use in low voltage, high frequency inverter, free wheeling

DO- 214AC
SMA



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V- 0 rate flame retardant
- * Polarity: Color band denotes cathode end
- * Weight: 0.064 grams



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK3						
				2A	3A	4A	5A	6A	9A	10A
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	90	100
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, TL(Fig.1)	3.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , $T_a=25^{\circ}C$	100						
Junction Temperature	T_J	$^{\circ}C$		-55~+125			-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	SK3						
				2A	3A	4A	5A	6A	9A	10A
Peak Forward Voltage	V_F	V	$I_F=3.0A$	0.50			0.70		0.85	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$			0.5		0.1	
	I_{RRM2}			$T_a=100^{\circ}C$			10		5.0	
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	55 ¹⁾						
	$R_{\theta J-L}$		Between junction and terminal	17 ¹⁾						

Notes:

- 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5 mm x 5 mm) copper pad areas

■ Characteristics (Typical)

FIG.1: FORWARD CURRENT DERATING CURVE

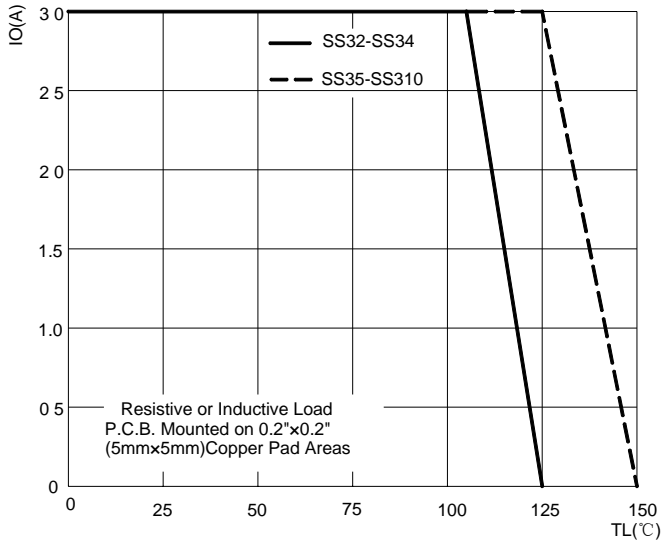


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

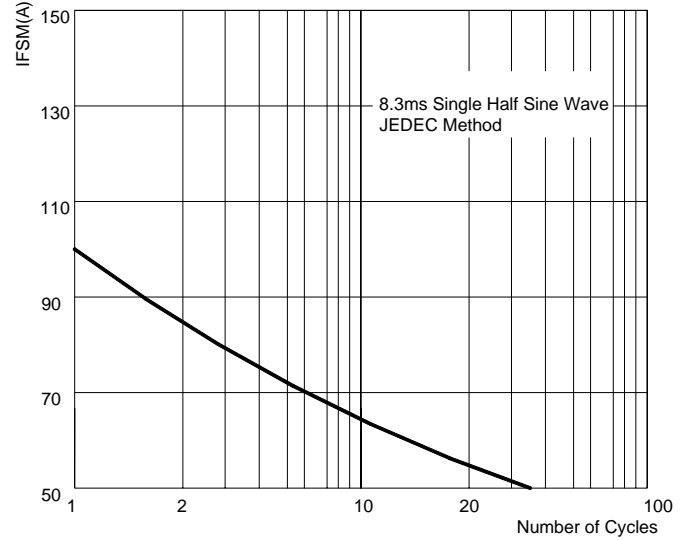


FIG.3: TYPICAL FORWARD CHARACTERISTICS

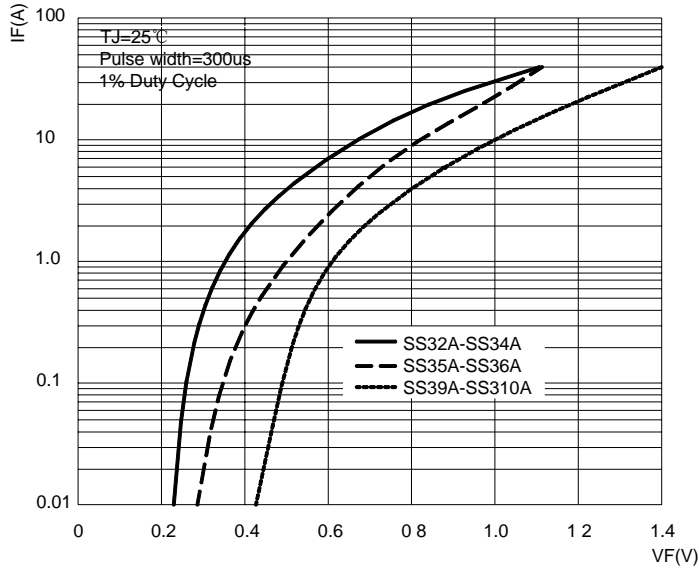
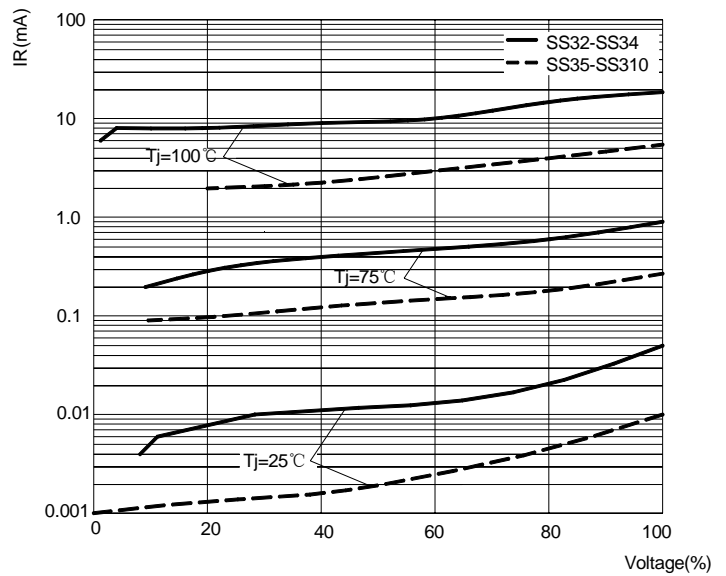


FIG.4: TYPICAL REVERSE CHARACTERISTICS



Package Dimensions in inches and (millimeters)

