

Surface Mount Schottky Rectifier

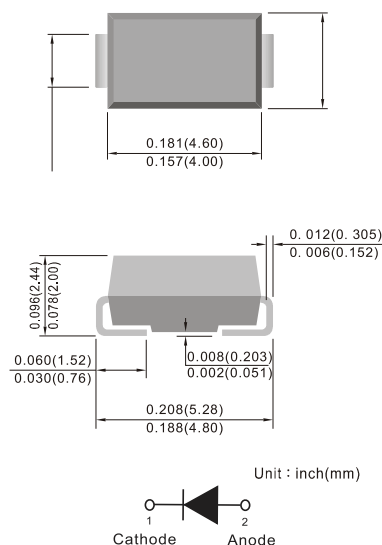
Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Compliant with RoHS standards, halogen-free

Mechanical Data

- **Package:** SMA/DO-214AC
- **Terminal:** Tin plated leads, solderable per
- **Polarity:** Cathode line denotes the cathode end

SMA/DO-214AC



Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	SS								
			32A	33A	34A	35A	36A	38A	310A	315A	320A
Repetitive peak reverse voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, resistance load, TL (FIG. 1)	I_O	A	3.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_A=25^\circ\text{C}$	I_{FSM}	A	70								
Storage temperature	T_{stg}	$^\circ\text{C}$	-55 ~ +150								
Junction temperature	T_J	$^\circ\text{C}$	-55 ~ +150					-55 ~ +175			

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	Test Conditions	SS								
				32A	33A	34A	35A	36A	38A	310A	315A	320A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode@ V _{RM} =V _{RRM}	I _{RRM}	mA	Ta=25°C	0.50					0.10			
			Ta=100°C	10					5.0			

Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	SS								
			32A	33A	34A	35A	36A	38A	310A	315A	320A
Thermal resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	55 ¹⁾								
	$R_{\theta J-L}$		17 ¹⁾								

Note

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Characteristics (Typical)

FIG1: Io-TL Curve

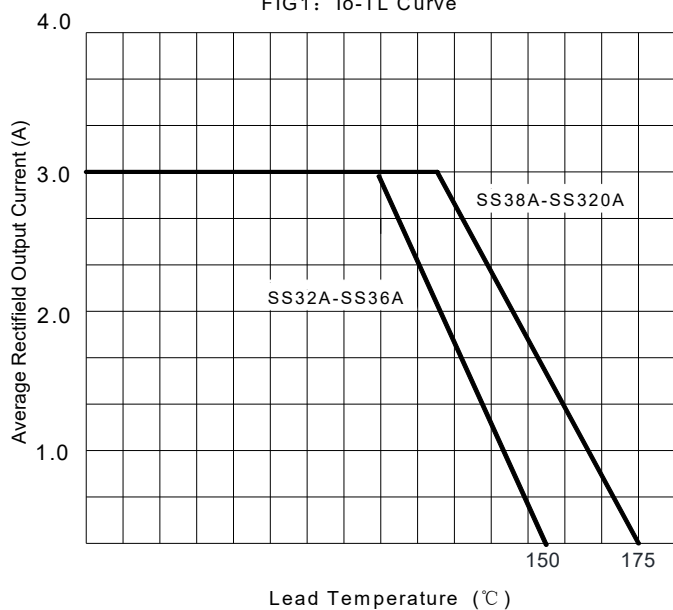


FIG2: Surge Forward Current Capability

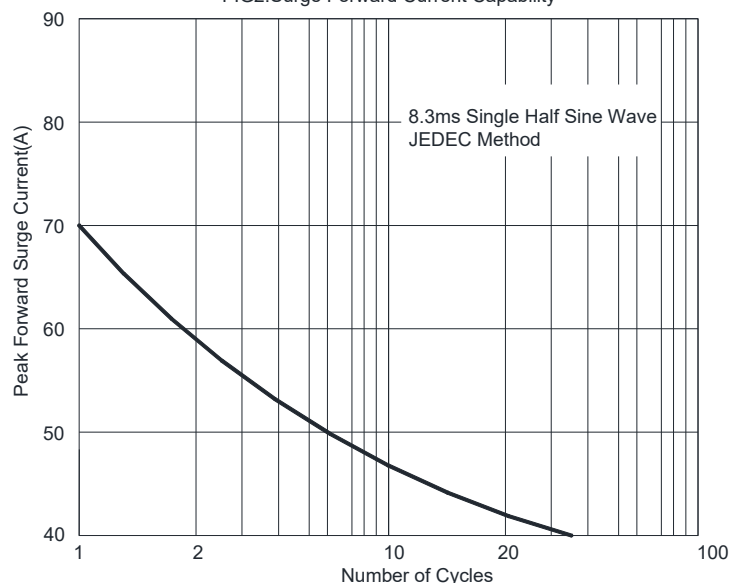


FIG3: TYPICAL FORWARD CHARACTERISTICS

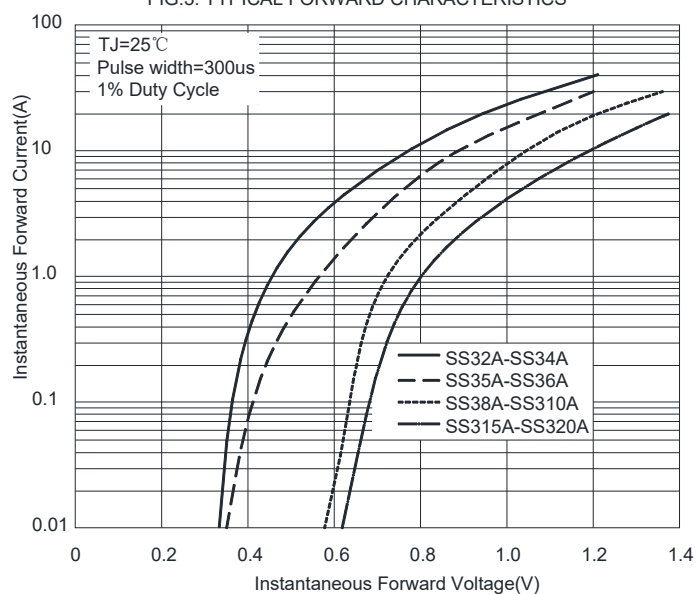


FIG4: Typical Reverse Characteristics

