

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Super Fast reverse recovery time
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

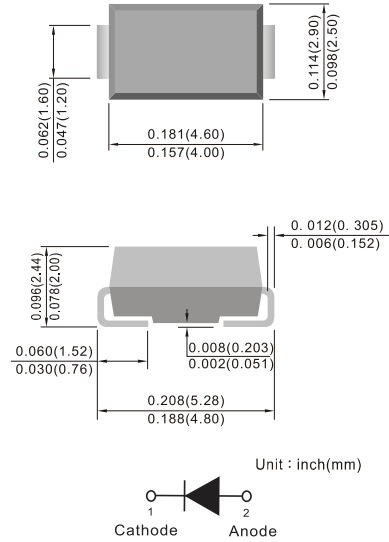
Typical Applications

For use in high frequency rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- **Package:** DO-214AC (SMA)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

DO-214AC (SMA)



■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2HA	ES2JA	ES2KA
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	150	200	300	400	500	600	800
Maximum RMS Voltage	VRMS	V	35	70	105	140	210	280	350	420	560
Maximum DC blocking Voltage	VDC	V	50	100	150	200	300	400	500	600	800
Average rectified output current @60Hz sine wave, Resistance load, TL (FIG.1)	Io	A	2.0								
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	50								
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			100								
Current squared time @1ms≤t≤8.3ms Tj=25°C	I²t	A²s	10.375								
Storage temperature	Tstg	°C	-55 ~ +150								
Junction temperature	Tj	°C	-55 ~ +150								

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2HA	ES2JA	ES2KA
Maximum instantaneous forward voltage	VF	V	IFM=2.0A	0.95				1.3		1.7		1.85
Maximum reverse recovery time	tr	ns	IF=0.5A, IR=1.0A, Irr=0.25A	35								
Maximum DC reverse current at rated DC blocking voltage	IR	μA	Tj =25°C	5								
			Tj =125°C	100								
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	31				17		12		

■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2HA	ES2JA	ES2KA
Typical Thermal Resistance	$R_{\theta JA}^{(1)}$	°C/W	65								
	$R_{\theta JL}^{(1)}$		20								
	$R_{\theta JC}^{(1)}$		18								

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

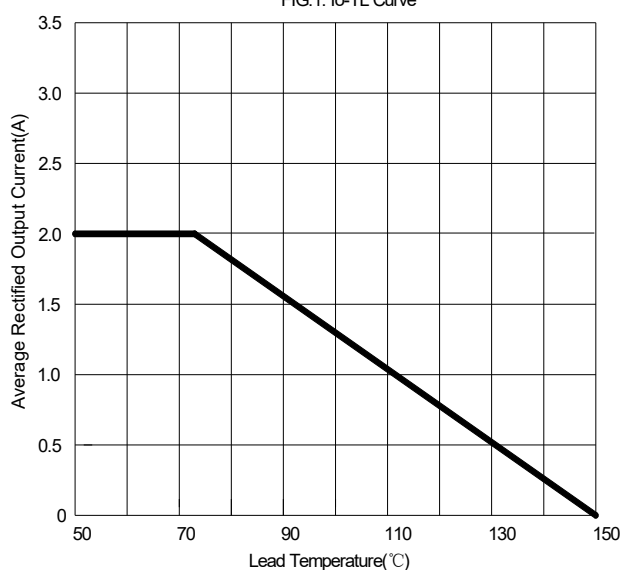


FIG2: Surge Forward Current Capability

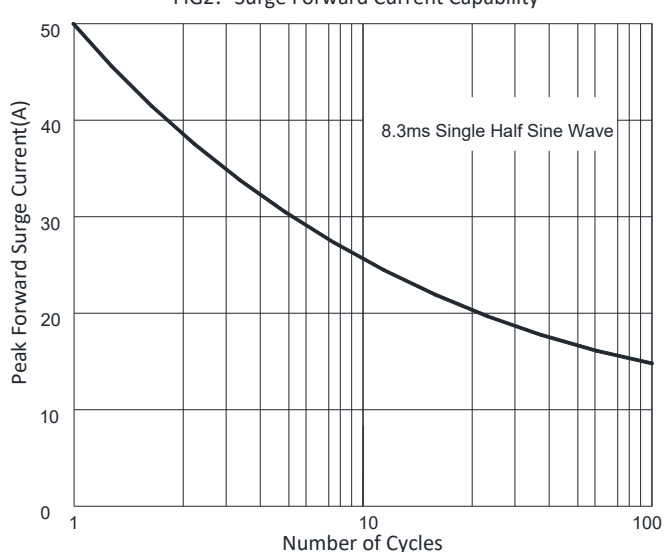


FIG3: Typical Forward Voltage

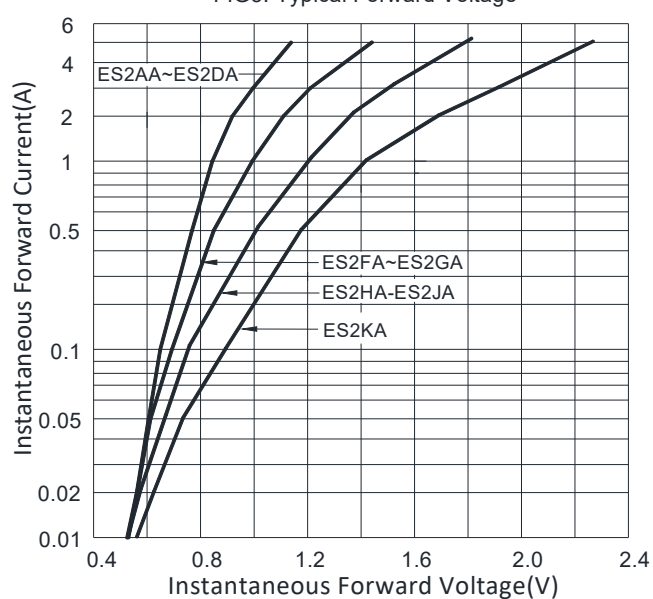


FIG4: Typical Reverse Characteristics

