

RoHS Compliant Product
 A suffix of "-C" specifies halogen & lead-free

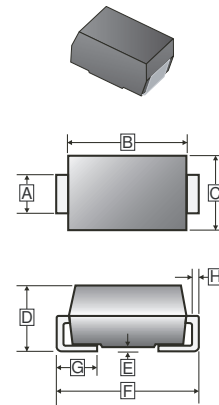
FEATURES

- 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

MECHANICAL DATA

- Case: SMA
- Epoxy: UL94V-0 Rate Flame Retardant
- Terminals: Tin Plated Leads, Solderable per J-STD-002 and JESD22-B102
- Polarity: Color Band Denotes Cathode

SMA



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.23	1.65	E	-	0.3
B	3.99	4.75	F	4.70	5.28
C	2.30	2.90	G	0.75	1.52
D	1.90	2.62	H	0.15	0.31

ORDER INFORMATION

Part Number	Type
ES203A-C~ES204A-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
 For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number		Unit
		ES203A-C	ES204A-C	
Repetitive Peak Reverse Voltage	V_{RRM}	200	400	V
Average Rectified Output Current @60Hz sine wave, Resistance load	I_O	2		A
Surge (Non-repetitive) Forward Current @60Hz half-sine wave	I_{FSM}	50		A
Maximum Instantaneous Forward Voltage Drop per Diode @ $I_F=2A$	V_F	0.95	1.3	V
Maximum DC Reverse Current @Rated DC Blocking Voltage	I_R	$T_A=25^\circ C$	5	μA
		$T_A=125^\circ C$	50	
Maximum Reverse Recovery Time ¹	T_{RR}	25		nS
Typical Thermal Resistance ²	$R_{\theta JA}$	75		°C/W
	$R_{\theta JL}$	20		
Operating & Storage Temperature Range	T_J, T_{STG}	-55~150		°C

Notes:

1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5mm x 5mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

FIG.1: I_o-T_L Curve

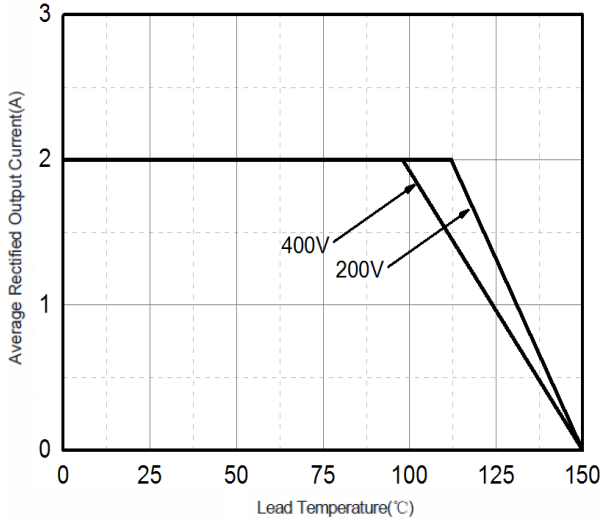


FIG.2: Surge Forward Current Capability

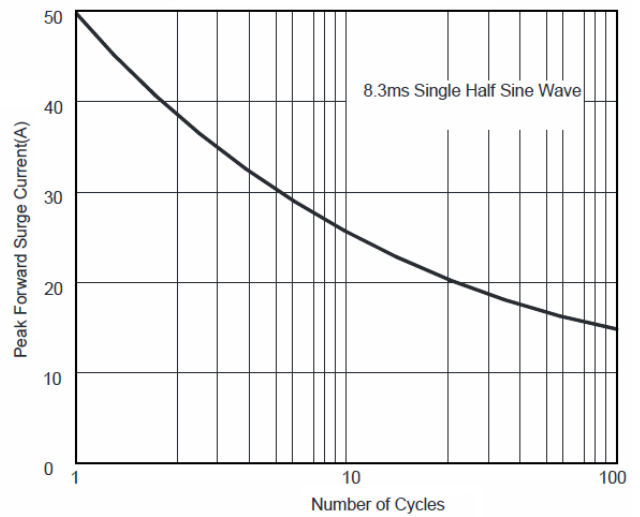


FIG.3: Typical Forward Characteristics

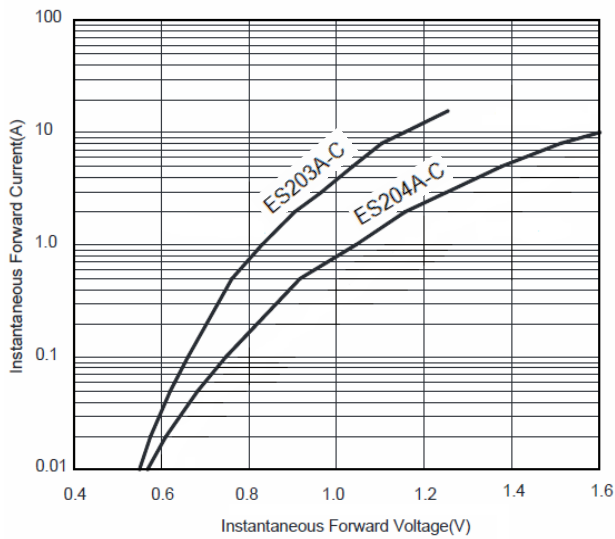


FIG.4: Typical Reverse Characteristics

