

■ FEATURES

- Glass Passivated Chip
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Solder dip 260 °C max. 10 s, per JESD 22-B106

■ MECHANICAL DATA

- Package : DO-214AB (SMC)
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals : Tin plated leads, solderable per MIL-STD-750 methode 2026.
- Polarity: Color band denotes cathode end

■ MAXIMUM RATINGS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	S3A	S3B	S3D	S3G	S3J	S3K	S3M
Device marking code			S3A	S3B	S3D	S3G	S3J	S3K	S3M
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, T _a (FIG.1)	I _o	A	3.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	100						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55 ~+150						

■ ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	S3A	S3B	S3D	S3G	S3J	S3K	S3M
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	1.15						
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	µA	T _a =25°C	10						
			T _a =125°C	250						
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	60						

■ THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	S3A	S3B	S3D	S3G	S3J	S3K	S3M
Thermal Resistance	Junction to ambient	R _{θJ-A}	47 ⁽¹⁾						
	Junction to lead	R _{θJ-L}	13 ⁽¹⁾						

Note(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

■ PACKAGING INFORMATION

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
S3A~S3M	Approximate 0.248	3000	6000	42000	13" reel

■ **CHARACTERISTICS (TYPICAL)**

FIG.1: Io-TL Curve

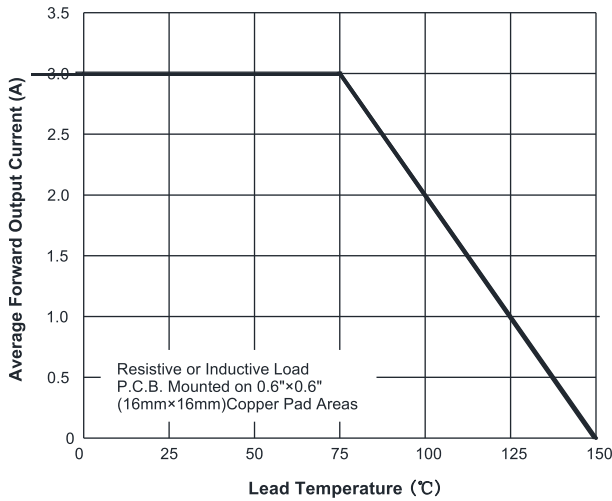


FIG.2: Forward Surge Current Capability

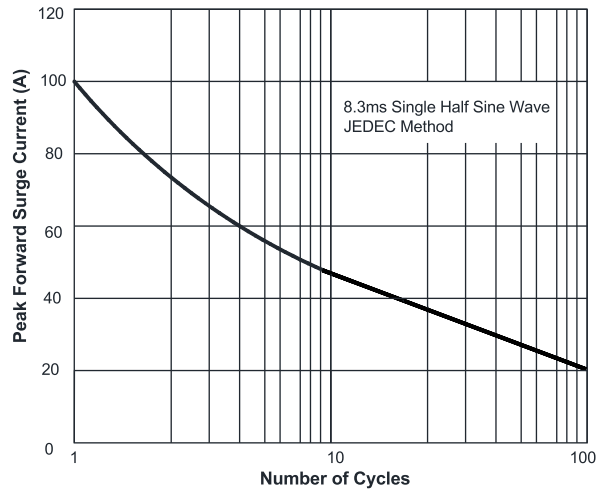


FIG.3: Typical Forward Voltage

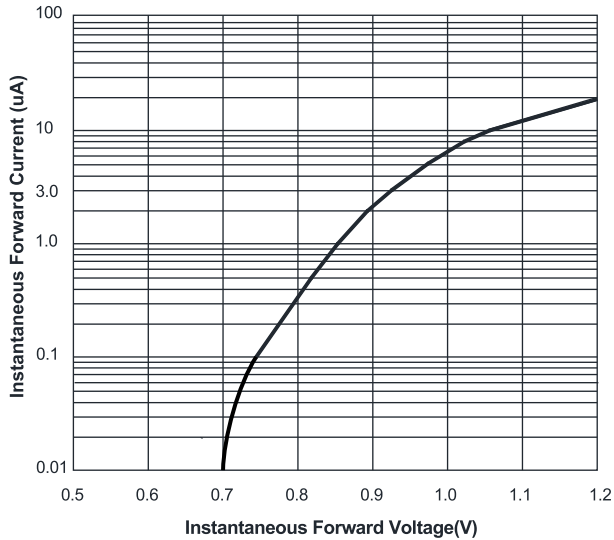


FIG.4: Typical Reverse Characteristics

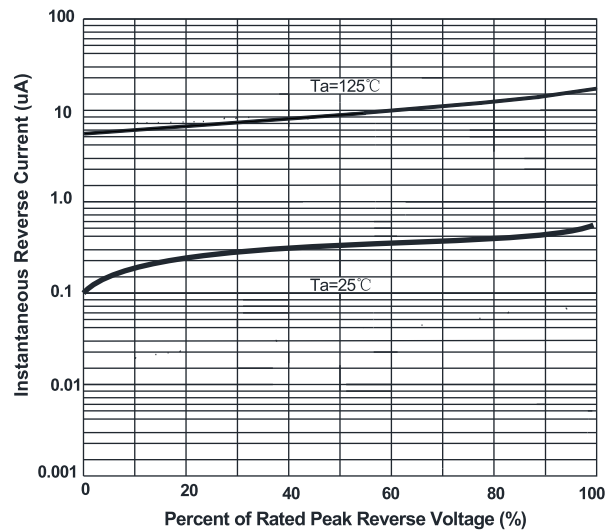


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

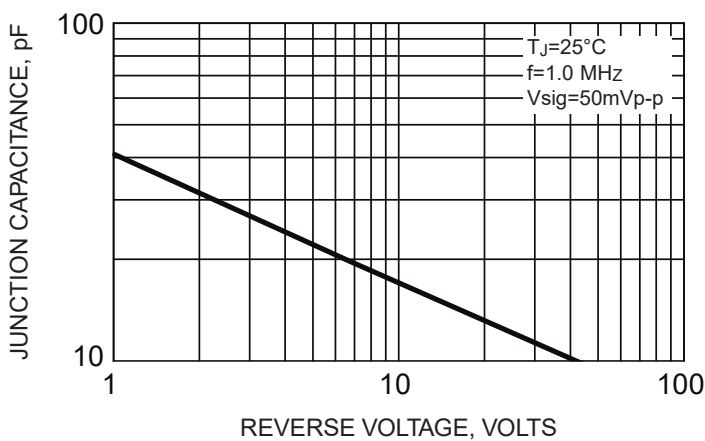
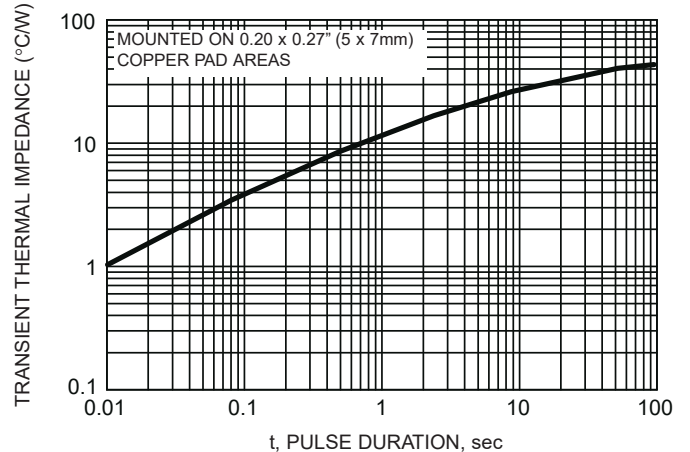
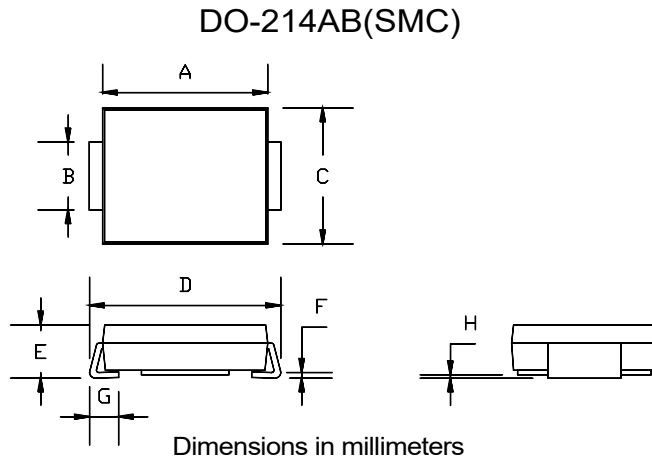


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

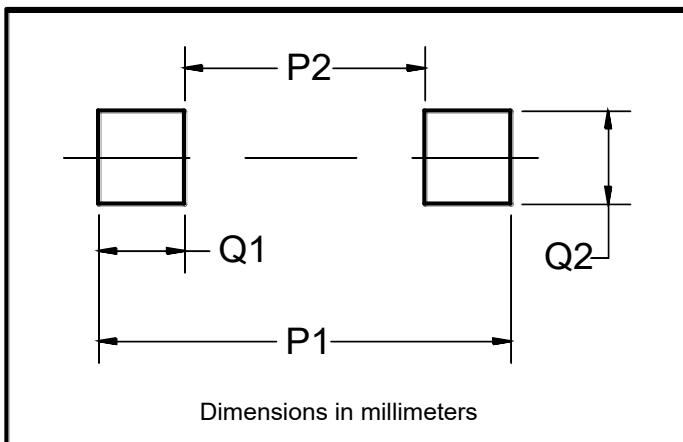


■ **OUTLINE DIMENSIONS**



DO-214AB (SMC)		
Dim	Min	Max
A	6.60	7.11
B	2.85	3.27
C	5.59	6.22
D	7.75	8.13
E	1.99	2.61
F	0.15	0.31
G	0.76	1.52
H	0.10	0.20

■ **SUGGESTED PAD LAYOUT**



Dim	Typ
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82