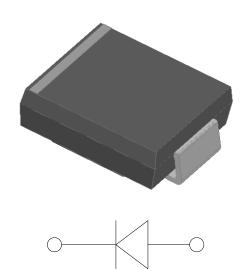




# **Surface Mount General Purpose Rectifier**



#### **Features**

- High efficiency
- 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 J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

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

= maximum radings (.a == = = ============================									
PARAMETER	SYMBOL	UNIT	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M
Device marking code			GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M
Repetitive Peak Reverse Voltage	$V_{RRM}$	٧	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, TL (FIG.1)	) I <sub>O</sub> A 3.0								
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Ta=25°C	I <sub>FSM</sub>	Α	100						
orage Temperature T <sub>stg</sub> °C -55 ~+150									
Junction Temperature	Tj	°C	-55 ~+150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	٧	V I <sub>FM</sub> =3.0A		1.1					
Maximum DC reverse current at rated DC blocking voltage	l-		Ta=25℃	5						
per diode			Ta=125℃	100						
Typical junction capacitance	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	25						

#### **■Thermal Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

PA	RAMETER	SYMBOL	UNIT	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M
Thermal	Junction to ambient	$R_{\theta J-A}$	°C/W	48 <sup>1)</sup>						
Resistance	Junction to lead	$R_{\theta J-L}$	C/VV	13 <sup>1)</sup>						

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



# **GS3A THRU GS3M**

#### **■Ordering Information** (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GS3A~GS3M	F1	Approximate 0.248	3000	6000	42000	13" reel

### ■ Characteristics(Typical)

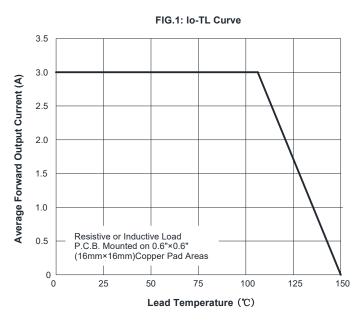


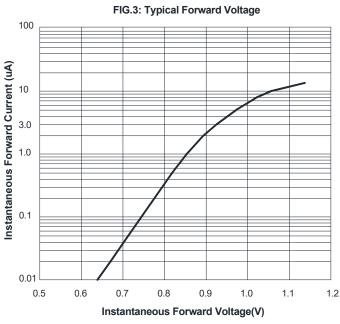
FIG.2: Forward Surge Current Capability

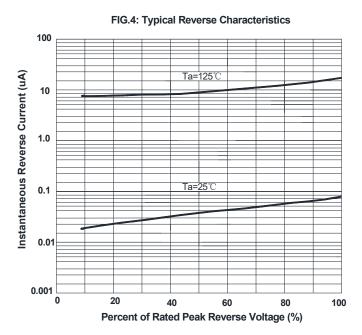
120

8.3ms Single Half Sine Wave JEDEC Method

20

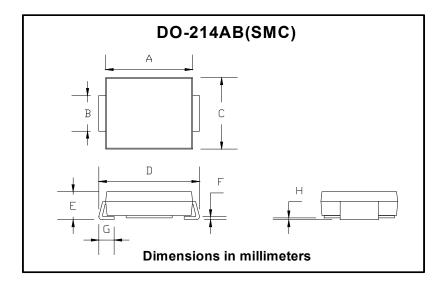
0 1 10 Number of Cycles





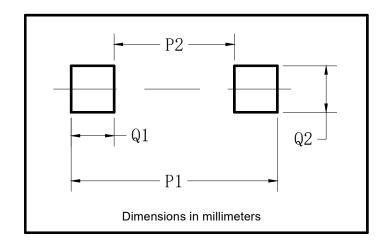
# **GS3A THRU GS3M**

#### **■ Outline Dimensions**



DO-214AB (SMC)						
Dim	Min	Max				
Α	6.60	7.11				
В	2.85	3.27				
С	5.59	6.22				
D	7.75	8.13				
E	1.99	2.61				
F	0.15	0.31				
G	0.76	1.52				
Н	0.10	0.20				

## ■ Suggested pad layout



Dim	Тур
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82



## **GS3A THRU GS3M**

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