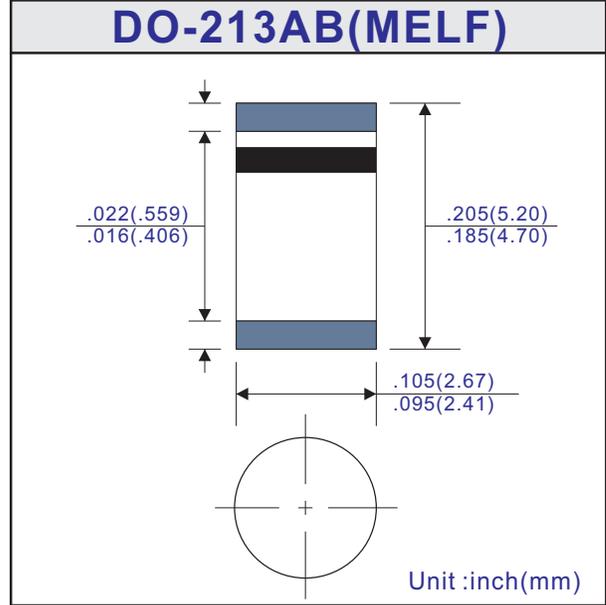




**1.0A Glass Passivated Surface Mount  
 Hi-Efficiency Rectifiers - 50V to 1000V**



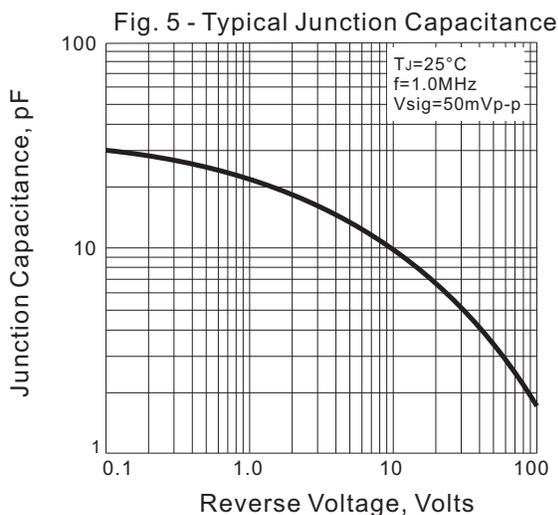
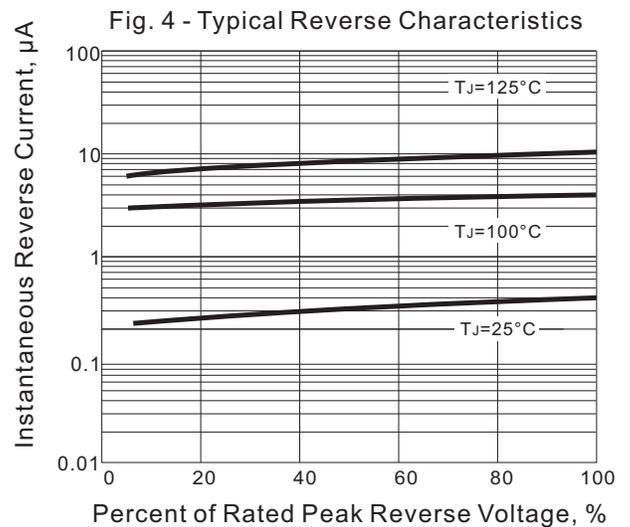
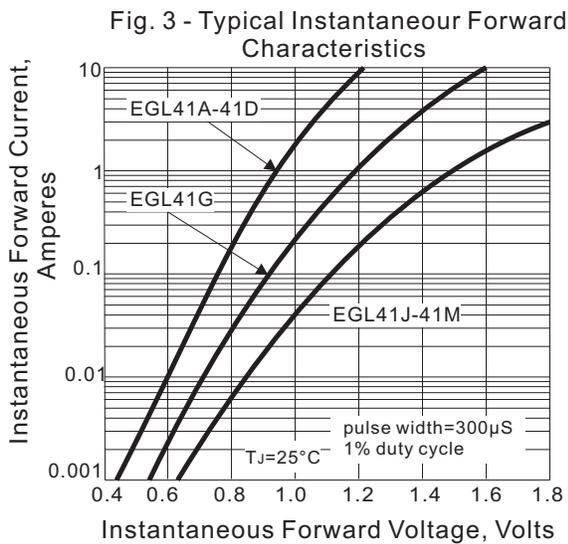
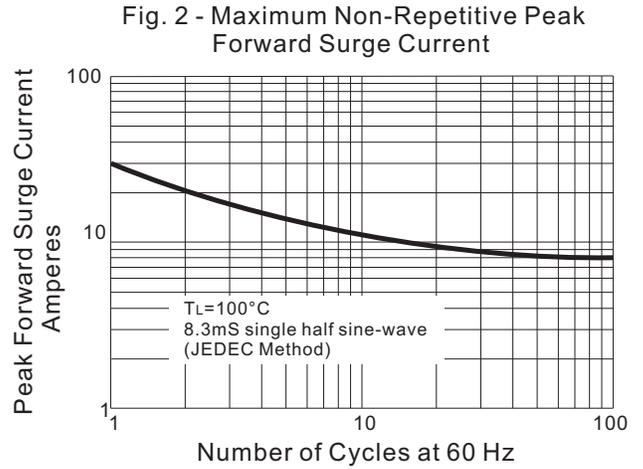
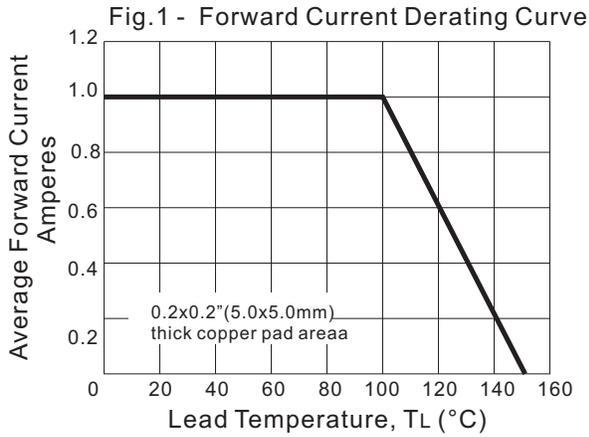
FEATURES
<ul style="list-style-type: none"> <li>• Low drop down voltage, low power loss</li> <li>• High current capability</li> <li>• Ultrafast Recovery time for high efficiency</li> <li>• Glass passivated chip junction</li> <li>• Surface mounted applications in order to optimize board space</li> <li>• Lead-free parts for green partner, meet RoHS requirements</li> </ul>



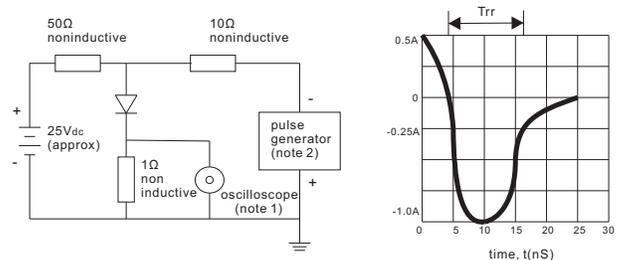
MECHANICAL DATA
<ul style="list-style-type: none"> <li>• Case: Molded plastic SMA/DO-213AB</li> <li>• Epoxy: UL94-V0 rated flame retardant</li> <li>• Terminals: Solderable per MIL-STD-750 Method 2026</li> <li>• Polarity: Color band denotes cathode end</li> <li>• Mounting Position: Any</li> <li>• Weight: 0.0046 ounces, 0.116 grams</li> </ul>

MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS											
Ratings at 25°C ambient temperature unless otherwise specified											
EGL-	Symbols	41A	41B	41D	41G	41J	41K	41M	Units		
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts		
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts		
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts		
Maximum Average Forward Rectified Current See Figure 1	I(AV)	1.0							Amps		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T <sub>L</sub> =100°C	IFSM	30.0							Amps		
Maximum Instantaneous Forward Voltage at 1.0A	V <sub>F</sub>	1.0		1.3		1.7			Volts		
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0		100.0							µA
Typical Reverse Recovery Time (Note 1)	T <sub>rr</sub>	50				75				nS	
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	15							pF		
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	60							°C/W		
	R <sub>θJL</sub>	30									
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150							°C		
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150							°C		

Note 1. Reverse recovery test condition: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A  
 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts  
 3. Thermal resistance from junction to ambient and from junction to lead mounted on 0.2x0.2" (5.0x5.0mm) copper pad areas



**Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic**



Note: 1. rise time=7nS Max. input impedance=1MHz 22pF  
 2. rise time=10nS Max. source impedance=80Ω