

SURFACE MOUNT RECTIFIERS

8A, Military, General Purpose

SM5550
SM5551
SM5552
SM5553

FEATURES

- Small Convenient Surface Mount Package
- Thermally Efficient
- Rugged Fused-In-Glass, Hermetic Construction
- Controlled Avalanche
- High Reliability Screening Capability

DESCRIPTION

The SM5550 series are general purpose rectifiers in hermetically sealed surface mount packages ideally suited for use where reduced board space and increased surface density are critical.

ABSOLUTE MAXIMUM RATINGS

Working Peak Voltage	
SM5550	200V
SM5551	400V
SM5552	600V
SM5553	800V
Maximum Average D.C. Output Current at $T_{EC}^{**} = 55^{\circ}C$	8.0A
Non-Repetitive Sinusoidal Surge Current, 8.3mS	100A
Operating Temperature Range	$-65^{\circ}C$ to $+175^{\circ}C$
Storage Temperature Range	$-65^{\circ}C$ to $+200^{\circ}C$
Thermal Resistance $R_{\theta J-EC}$	$10^{\circ}C/W$

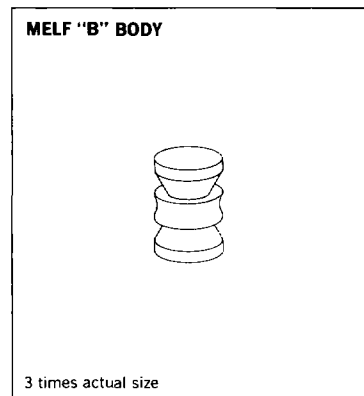
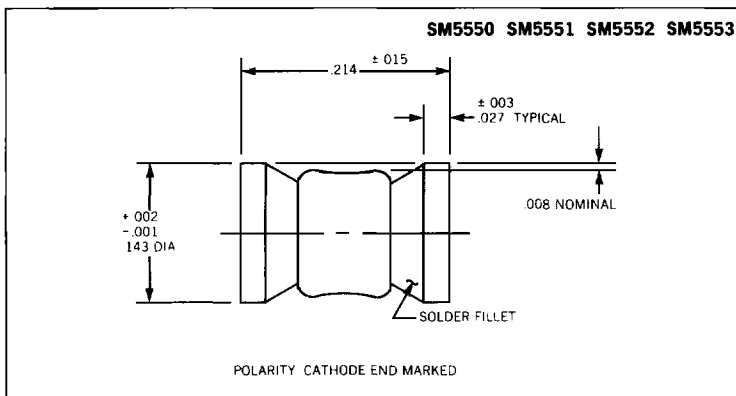
ELECTRICAL SPECIFICATIONS (@ $25^{\circ}C$ unless noted)

Type	V_{RWM}	Minimum Reverse Breakdown Voltage @ $50\mu A$	Peak Forward Voltage		Maximum Leakage Current @ V_{RWM}		Maximum Reverse Recovery Time*
			Min.	Max.	$25^{\circ}C$	$100^{\circ}C$	
SM5550	200V	240V	0.6V @ $I_F = 9A(pk)$ (8.3mS)	1.2V	1.0 μA	75 μA	2.0 μS
SM5551	400V	460V					
SM5552	600V	660V					
SM5553	800V	880V					

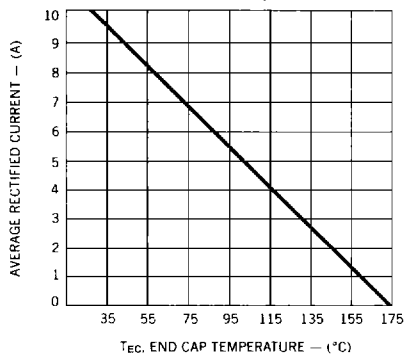
*Measured in a test circuit $I_F = 0.5A$, $I_R = 1.0A$, $I_{REC} = 0.25A$
**EC = End caps (mounting terminals)

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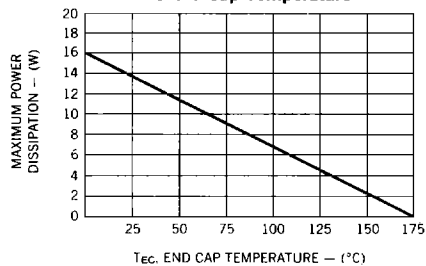
MECHANICAL SPECIFICATIONS



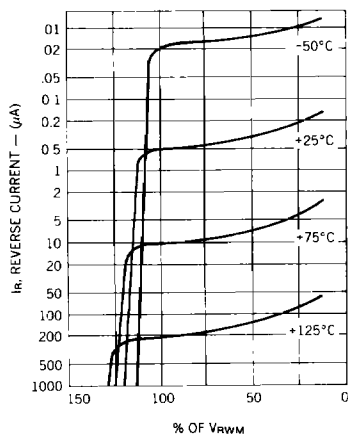
**Maximum Current
 vs End Cap Temperature**



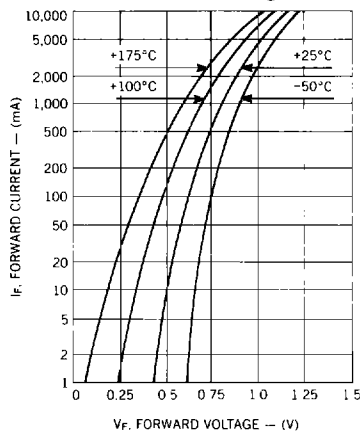
**Maximum Power Dissipation
 vs End Cap Temperature**



**Typical Reverse Current
 vs V_{RWM}**



**Typical Forward Current
 vs Forward Voltage**



Characteristic Wave Form

