Micro Commercial Components
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ER3A-HT THRU ER3M-HT

3.0 Amp High Efficient Rectifiers 50 to 1000 Volts

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Maximum Ratings

- Operating Temperature: -55℃ to +125℃
- Storage Temperature: -55℃ to +150℃

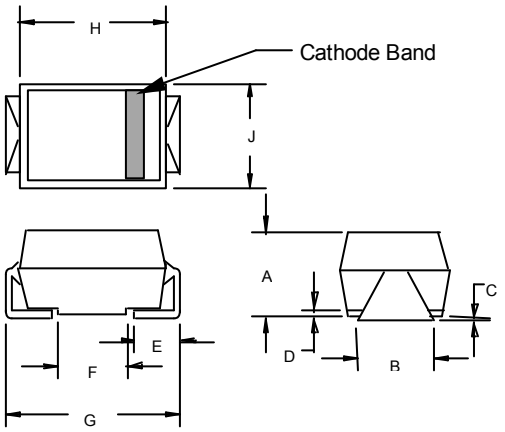
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER3A-HT	ER3A	50V	35V	50V
ER3B-HT	ER3B	100V	70V	100V
ER3D-HT	ER3D	200V	140V	200V
ER3G-HT	ER3G	400V	280V	400V
ER3J-HT	ER3J	600V	420V	600V
ER3K-HT	ER3K	800V	560V	800V
ER3M-HT	ER3M	1000V	700V	1000V

Electrical Characteristics @ 25℃ Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	T_A = 55℃
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage ER3A-HT~ER3D-HT ER3G-HT ER3J-HT~ER3M-HT	V_F	 1.0V 1.3V 1.7V	I_{FM} = 3.0A; T_A = 25℃
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	 10uA 200uA	 T_A = 25℃ T_A = 100℃
Maximum Reverse Recovery Time ER3A-HT~ER3G-HT ER3J-HT~ER3M-HT	Trr	 50ns 75ns	 I_F=0.5A, I_R=1.0A I_{RR}=0.25A
Typical Junction Capacitance ER3A-HT~ER3G-HT ER3J-HT~ER3M-HT	C_J	 80pF 50pF	 Measured at 1.0MHz, V_R=4.0V

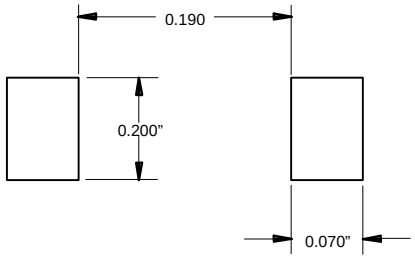
*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

DO-214AB
(SMCJ) (Round Lead)



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	.200	.214	5.08	5.43	
B	.177	.203	4.70	5.30	
C	.002	.005	.05	.13	
D	---	.02	---	.51	
E	.047	.056	1.20	1.42	
F	.168	.179	4.27	4.55	
G	.309	.322	7.85	8.18	
H	.239	.243	6.08	6.18	
J	.234	.240	5.95	6.10	

SUGGESTED SOLDER PAD LAYOUT



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RATINGS AND CHARACTERISTIC CURVES

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

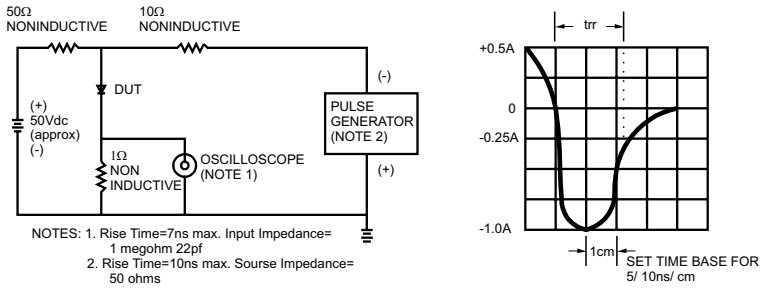


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

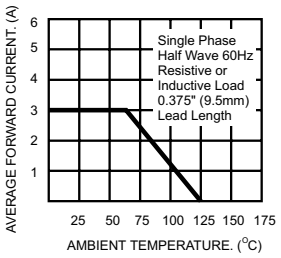


FIG.3- TYPICAL REVERSE CHARACTERISTICS

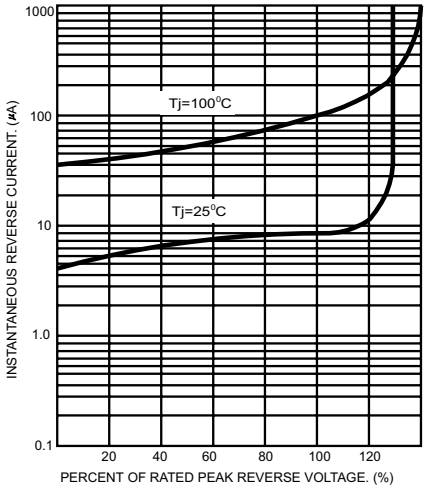


FIG.5- TYPICAL FORWARD CHARACTERISTICS

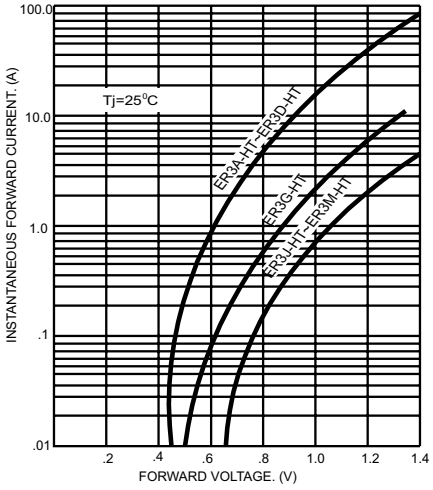


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

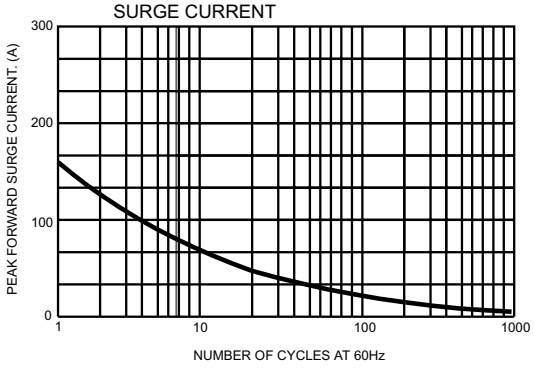


FIG.6- TYPICAL JUNCTION CAPACITANCE

