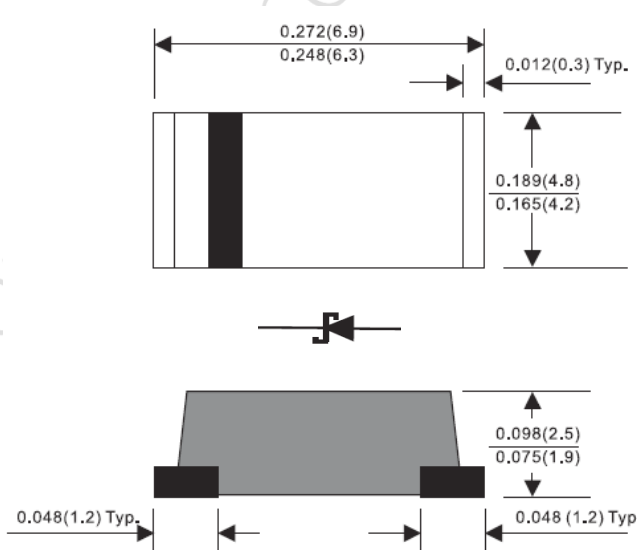


5A SMD SCHOTTKY BARRIER RECTIFIERS, 20V-200V

	<h3>PRODUCT FEATURES</h3> <ol style="list-style-type: none"> 1. FLAMMABILITY CLASSIFICATION 94V-0 2. EXCELLENT REVERSE LEAKAGE CURRENT AND THERMAL RESISTANCE 3. HIGH CURRENT CAPABILITY, LOW POWER LOSS 4. SILICON EPITAXIAL PLANAR CHIP, METAL SILICON JUNCTION 5. GUARDRING FOR OVERVOLTAGE PROTECTION 6. CASE: TRANSFER MOLDED, DO-214AB (SMC) 7. DIMENSIONS IN INCHES AND (MILLIMETERS) 8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026 9. WEIGHT: 0.19 GRAMS 10. RoHS COMPLIANT, ADD SUFFIX "H" FOR HALOGEN FREE i.e. FM520-H: RoHS COMPLIANT/HALOGEN FREE
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ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL		UNITS
MAXIMUM FORWARD RECTIFIED CURRENT	I_o	5	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	150	A
TYPICAL JUNCTION CAPACITANCE BETWEEN TERMINALS (NOTE 1)	C_J	380	pF
STORAGE TEMPERATURE RANGE	T_{STG}	- 65 TO +175	$^\circ\text{C}$
OPERATING JUNCTION TEMPERATURE RANGE (NOTE 2)	T_J	- 55 TO +150	$^\circ\text{C}$
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 25^\circ\text{C}$	I_R	0.5	mA
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 100^\circ\text{C}$	I_R	20	mA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	32	$^\circ\text{C/W}$
	$R_{\theta JC}$	16	$^\circ\text{C/W}$

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	TYPICAL FORWARD VOLTAGE AT $I_F = 5A$ V_F (V)	MARKING
FM520	20	14	0.55	SS52
FM530	30	21	0.55	SS53
FM540	40	28	0.55	SS54
FM550	50	35	0.70	SS55
FM560	60	42	0.70	SS56
FM580	80	56	0.85	SS58
FM5100	100	70	0.85	S510
FM5150	150	105	0.90	S515
FM5200	200	140	0.92	S520

NOTE : 1. MEASURE AT 1MHz WITH 4VDC REVERSE VOLTAGE APPLIED .

2. FOR THE FM520 THRU FM540, THE OPERATING JUNCTION TEMPERATURE RANGE IS FROM -55 TO +125 $^\circ\text{C}$



3. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

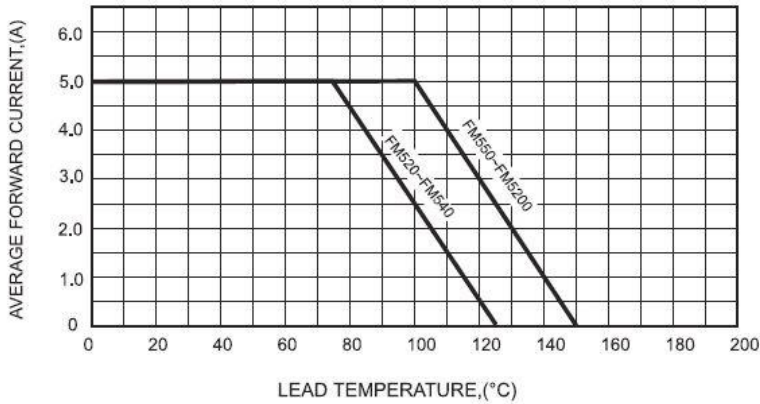


FIG.2-TYPICAL FORWARD CHARACTERISTICS

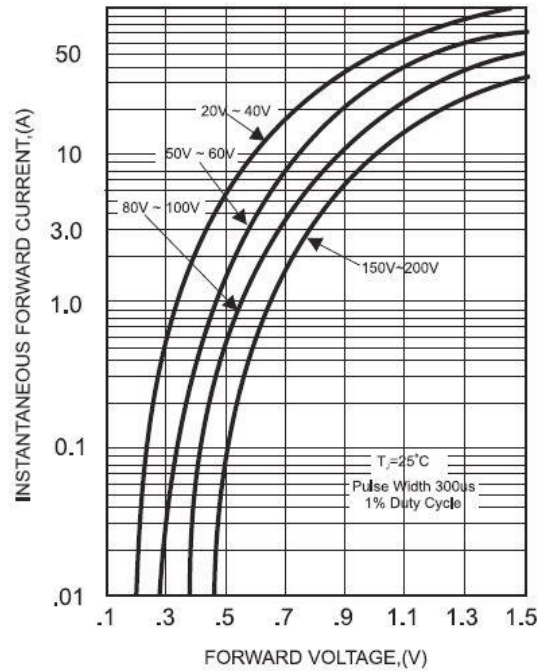


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

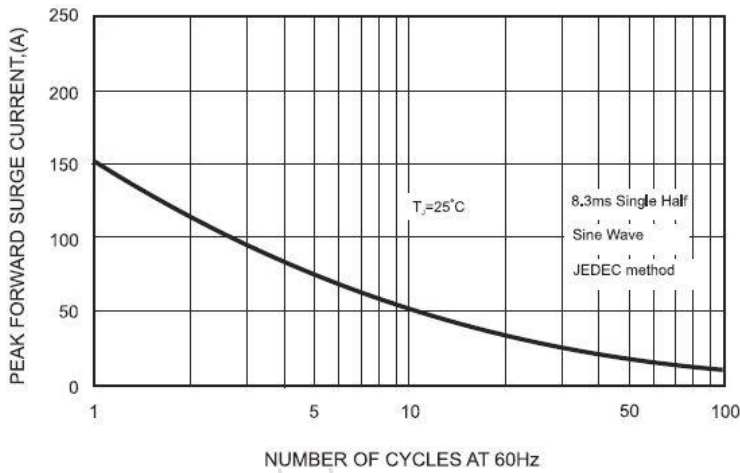


FIG.4-TYPICAL JUNCTION CAPACITANCE

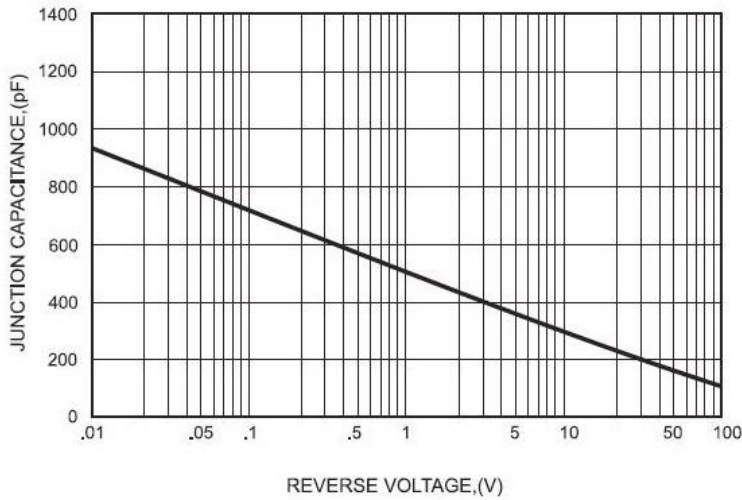
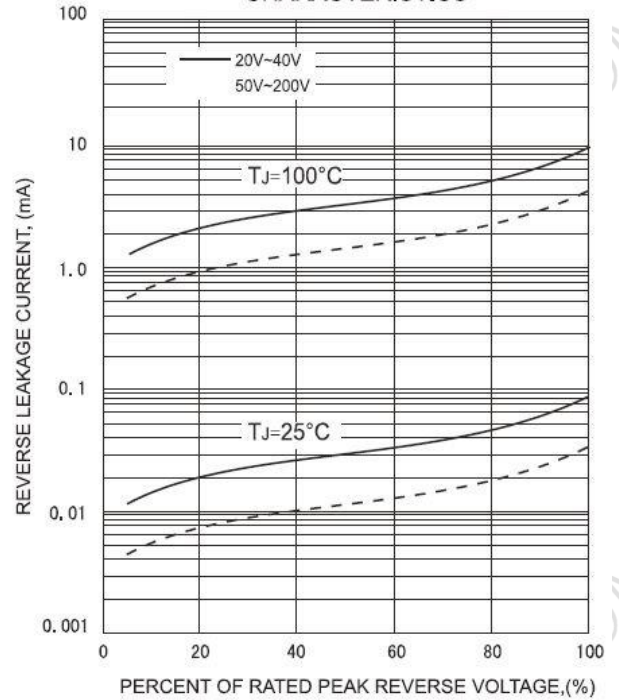
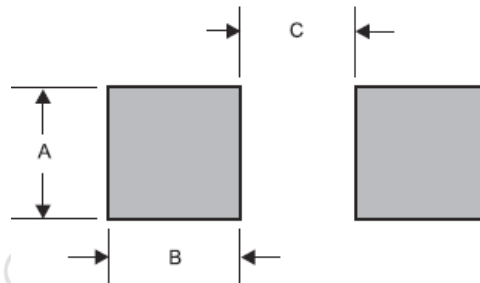


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



LAYOUT RECOMMENDATION



PACKAGE	A	B	C
SMC	0.189 (4.80)	0.063 (1.60)	0.158 (4.00)