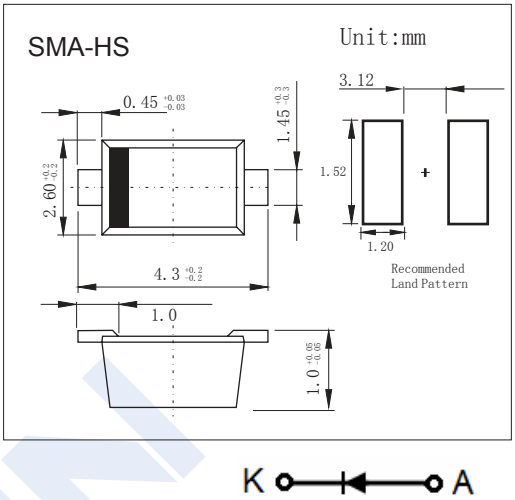
Schottky Diodes

VSSAF5L45



■ Features

- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Trench Schottky Design using 8" Advanced Technology
- Soft, Fast Switching Capability
- Low Power Loss, High Efficiency
- Lead Free Finish,RoHS Compliant
- Excellent ESD protection up to 30KV.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Forward Rectified Current	I_{FAV}	5	A
Peak forward surge current @ 60Hz half sine-wave	I_{FSM}	80	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	37	℃/W
Thermal Resistance Junction to Lead	$R_{\theta JC}$	12	
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-65 to 150	

Note.1: Mounted on FR-4 PCB

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 0.3 mA	45			V
Forward voltage	V_F	I_F= 1 A,T_J = 25℃		0.32		
		I_F= 5 A,T_J = 25℃		0.47	0.52	
Reverse voltage leakage current	I_R	V_R= 45 V,T_J = 25℃			0.15	mA
		V_R= 45 V,T_J = 125℃			45	

■ Marking

Marking	*5L45

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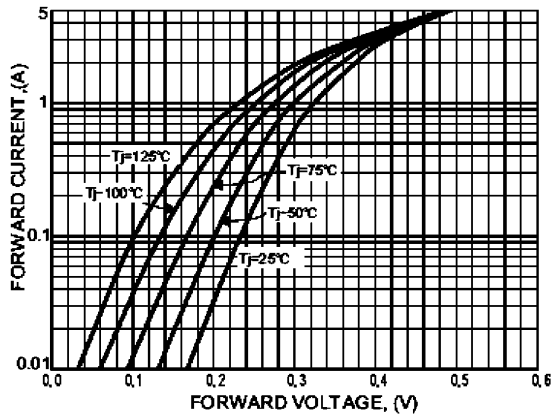
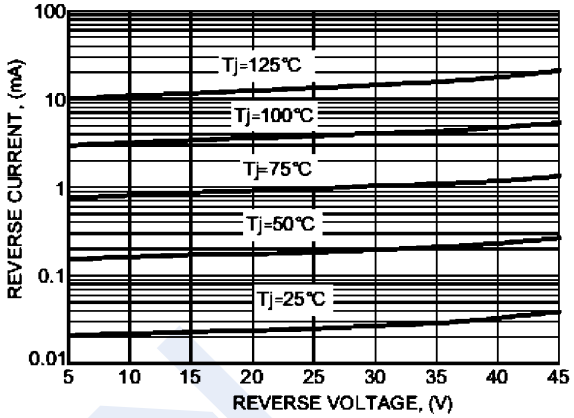
■ Typical Characterisitics

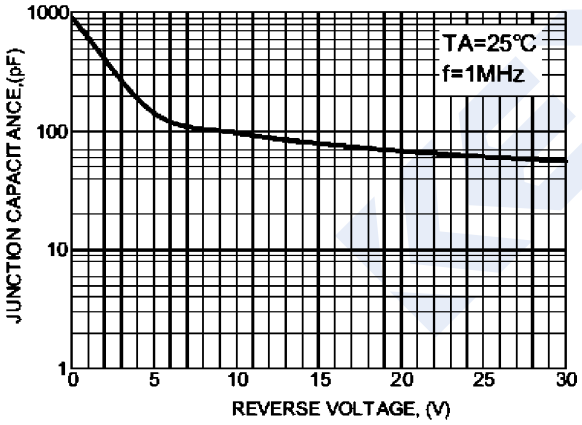
TYPICAL FORWARD CHARACTERISTICS



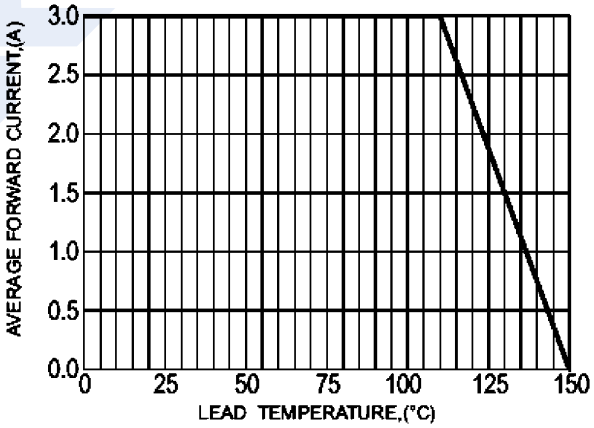
TYPICAL REVERSE LEAKAGE CHARACTERISTICS



TYPICAL JUNCTION CAPACITANCE



TYPICAL FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT