

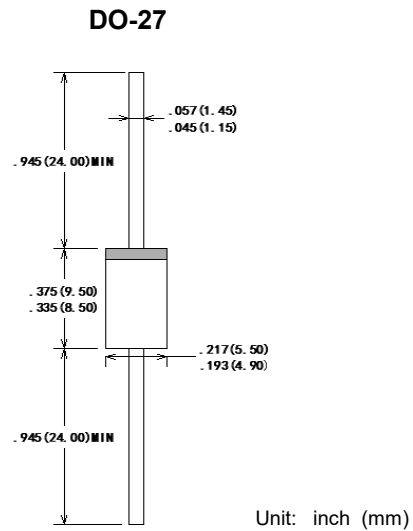
Trench Low V_F Axial Lead Schottky Barrier Diode

Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed:
260°C/10 seconds, 9.5mm lead length
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking

Mechanical Data

- Case: DO-27 Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free



Maximum Ratings & Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	TSR5300L	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	300	V
Maximum RMS voltage	V_{RMS}	210	V
Maximum DC blocking voltage	V_{DC}	300	V
Maximum average forward rectified current	$I_{F(AV)}$	5.0	A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	150	A
Maximum forward voltage@ $I_F=5.0\text{A}$	V_F	0.90	V
Maximum reverse current @ V_{DC}	I_R	0.1 10	mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	54	$^\circ\text{C/W}$
Type junction capacitance $V_R=4.0\text{V}, f=1\text{MHz}$	C_J	320	pF
Operating junction temperature rang	T_J	-55 ~ +125	$^\circ\text{C}$
Storage temperature rang	T_{STG}	-55 ~ +150	$^\circ\text{C}$

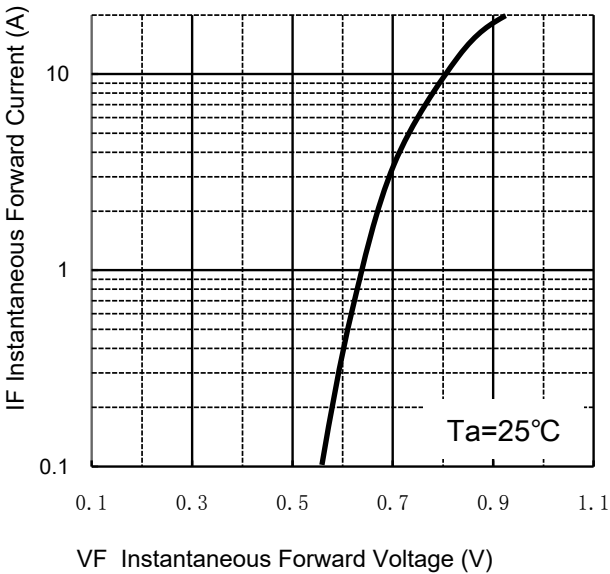
Note:

1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

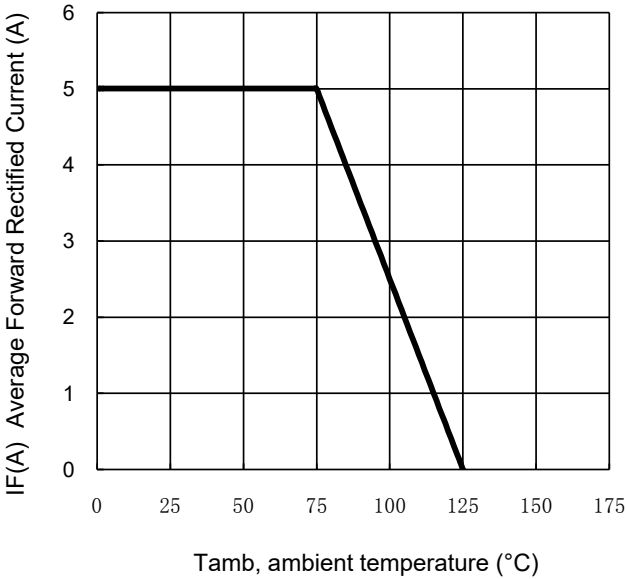


Characteristic Curves

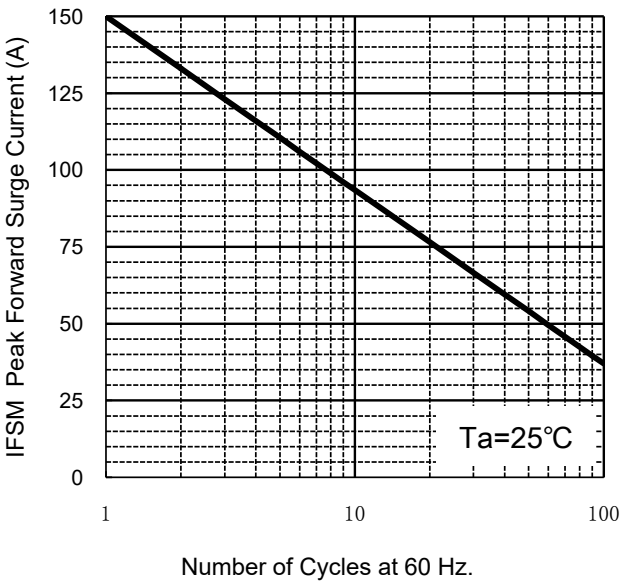
Typical Forward Characteristic



Forward Current Derating Curve



Maximum Non Repetitive
Peak Forward Surge Current



Typical Reverse Characteristics

