

US5P Surface Mounted High-efficiency Rectifiers

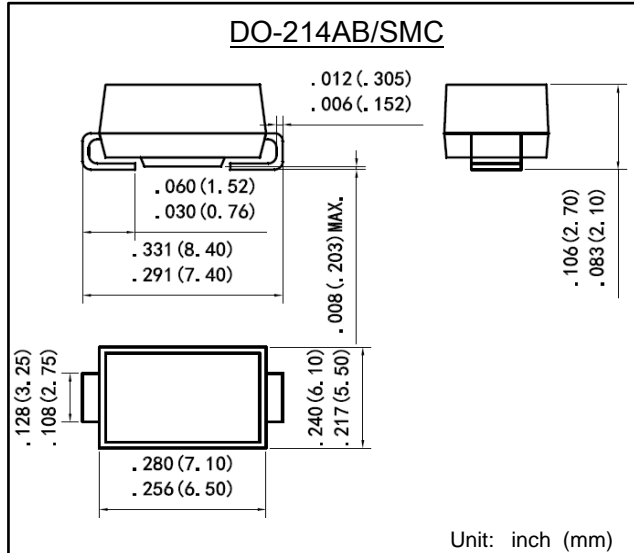
Reverse Voltage 1300 V Forward Current 5.0 A

Features

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

Mechanical Data

- Case: DO-214AB Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free



Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	US5P	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1300	V
Maximum RMS voltage	V_{RMS}	910	V
Maximum DC blocking voltage	V_{DC}	1300	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}	20	A
Maximum forward voltage @ $I_F=5.0A$	V_F	2.0	V
Maximum reverse current @ V_{DC}	I_R	$T_A=25^{\circ}C$	5
		$T_A=125^{\circ}C$	100
MAX. reverse recovery time $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$	T_{RR}	75	nS
Typical thermal resistance (Note 1)	$R_{\theta JA}$	75	$^{\circ}C/W$
Type junction capacitance $V_R=4.0V, f=1MHz$	C_J	60	pF
Operating junction temperature rang	T_J	-55 --- +150	$^{\circ}C$
storage temperature rang	T_{STG}	-55 --- +150	$^{\circ}C$

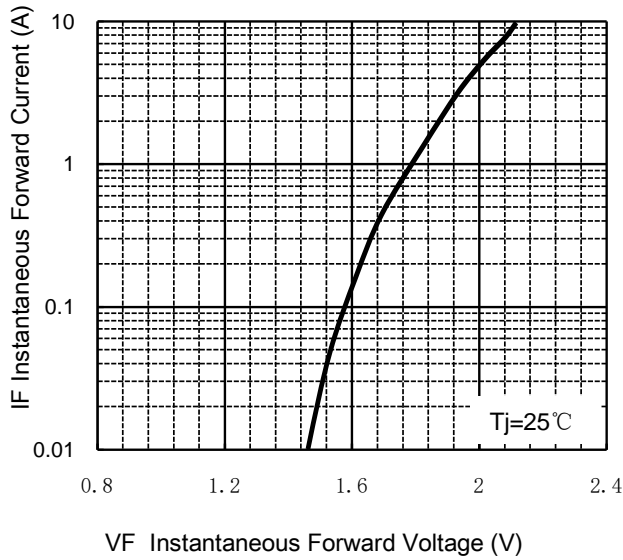
Note:

1) Thermal resistance from junction to ambient, PCB mounted.

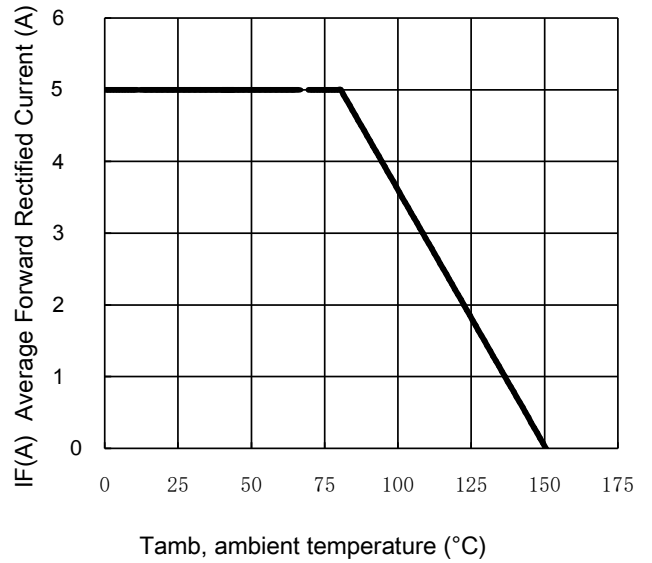
US5P

Characteristic Curves

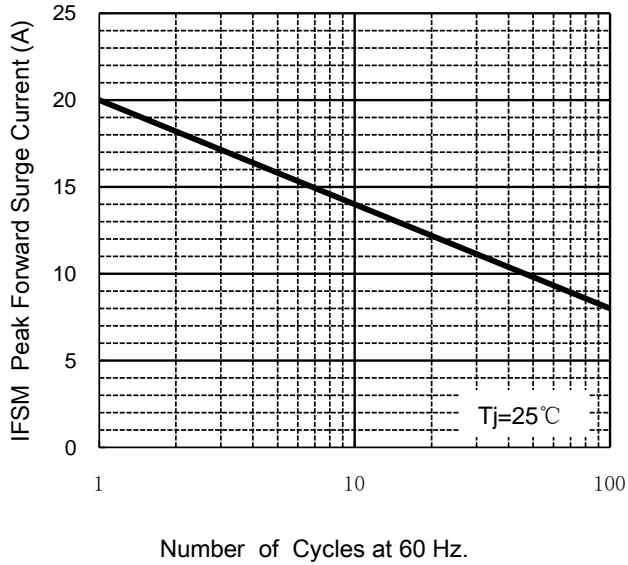
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS

